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### **RESPONSE TO PUBLIC COMMENTS**

### INTRODUCTION AND PROCESS

### Introduction

This appendix contains summaries of public comment received regarding the Draft Environmental Impact Statement and Proposed Revised Land and Resource Management Plan for the Daniel Boone National Forest. The comment period ran from May 16 to August 14, 2003. The Forest Service received 1,181 responses, including letters, emails, and faxes; 625 of these were form letters and 556 were responses with original text.

Included are an explanation of the content analysis process, an overview of comments, a summary of demographics of those who commented, and finally a detailed summary of public concerns and agency responses by topic. The Overview of Comments section provides a summary of comments expressed for each topic. The Demographics section includes several tables displaying various classifications of the commenters. The Summary of Public Concerns and Agency Response section contains summarized statements that represent all the concerns and the Forest Service's response. Associated comments can be found in the process records.

### **Content Analysis Process**

The content analysis was organized to provide a topical review of voluminous comments in a format that aids decision makers in their consideration and agency response. After each comment was analyzed, it was assigned a subject and category code. After all comments and their assigned codes were entered into the database, writer/analysts evaluated all the comments in each subject area and identified specific concerns. There could have been only one or as many as several hundred comments addressing the same concern, but the writers composed a summary statement to reflect that concern. This process helps planners and decision makers identify issues, determine how to respond to concerns, and decide what changes in the document or proposed action should result. Analysts did not make any judgments about the relative merit or substance of comments as they composed statements to summarize public concerns. All concerns have been summarized and presented to decision makers who will determine how to respond. They will also determine if any changes should be made to the proposed action or plan.

Content analysis is a method of eliciting meanings, ideas, and other information from written text, pictures, or audio or video messages. The Content Analysis Team (CAT), a specialized Forest Service unit that analyzes public comment on federal land and resource management agency projects and proposals, developed this methodology, which takes both qualitative and quantitative approaches. In addition to discovering specific demographic information and developing a mailing list of respondents, this systematic process can identify individual comments by topic in each response, evaluate similar comments from different responses, and summarize like comments as specific concern statements. The process also provides a relational database capable of reporting various types of information while linking comments to original letters.

Through the content analysis process, CAT analysts strive to identify all relevant issues, not just those represented by the majority of respondents. The breadth, depth, and rationale of each comment are taken into account. Thus, CAT analysts organize concern statements to facilitate systematic review and response by decision makers.

Each response was analyzed, and each comment that contained a stand-alone argument in support of a particular management action and its accompanying rationale, was identified. Each comment was assigned a subject and category code that allowed all comments to be sorted by topic. From the many comments regarding each topic, CAT analysts identified one or more public concerns. Therefore, one response may address from one to several hundred comments.

### **Categories of Public Concerns**

The following is a list of the general categories of public concerns identified during the content analysis process.

- 1) **Process, Planning, Policies, and Laws** includes comments on general planning considerations related to the forest plan revision. Included in the planning section are topics such as the role of interest groups, public involvement considerations, agency organization and funding, and the relation of the forest plan to other agency plans and directives
- 2) Alternatives includes comments regarding the alternatives detailed in the Draft EIS and suggestions that respondents offer for new alternatives
- 3) **Environment** includes comments concerning environmental issues such soils, air quality, noise, water resources, wildlife, fisheries, and vegetation
- 4) **Transportation** includes comments relating to the transportation infrastructure on National Forest System lands, including road building, maintenance, and decommissioning; and trails
- 5) **Recreation** includes comments addressing the various recreational issues and opportunities on National Forest System lands
- 6) **Special Designations and Lands** includes comments relating to special land designations on the forest including roadless areas, wilderness areas, and wild and scenic river designations; and comments focusing on land ownership, land exchanges, and right-of way issues
- 7) **Natural Resources Management** includes comments relating to the various natural resources and resource management related activities that take place on National Forest System lands including timber harvest, fire management, mineral resources, and utility facilities
- 8) **Social and Economic Values** includes comments relating to the social and economic values provided by and impacted by National Forest System lands.

### **OVERVIEW OF PUBLIC COMMENTS**

Public comments on the Daniel Boone National Forest DEIS and Proposed Revised Forest Plan were far-reaching, often highly detailed, and represented a wide range of values and perspectives. Given the wide range of values and perspectives, only broad generalizations are possible in this overview.

Below is a summary of the comments in each section regarding the Daniel Boone National Forest DEIS and Proposed Revised Forest Plan.

#### Process, Planning, Policies, and Laws

The Process, Planning, and Policy section contains comments associated with the forest plan revision and the relationship between the plan revision and current agency policies, directives, and laws. Individuals commenting on the Alternatives Section offer critiques of the agency-analyzed alternatives as well as suggestions for new alternatives. In the next section, commenters offer a wide range of views on the environmental values of National Forest System lands and how the agency can best protect these resources.

Regarding general planning, some respondents ask the Forest Service to make statements of goals, objectives, and standards more specific and quantifiable. Some commenters express concerns about using the Content Analysis Team to analyze public comment. Commenters also state that the Forest Service should consult more with the U.S. Fish and Wildlife Service to comply with the Endangered Species Act. The Army National Guard comments that the Forest Service should ensure that the military has continuing access to forest land. The role of interest groups, ranging from environmentalists to industry, generated some public comment. While some respondents say that environmental groups have too much influence on Forest Service actions, others write that industry unduly influence agency decisions.

Some respondents recommend that the Forest Service provide meaningful opportunities for citizen involvement in National Forest System land decisions, and provide adequate information to the public. Respondents ask that the Forest Service conduct additional public meetings, and that the comment period be extended.

Some writers state that the Forest Service should use the best available science, including peer-reviewed studies and review by independent scientists. Some respondents say that the maps included with the revised forest plans should provide more detail and be of quality. Commenters write that the Forest Service should increase funding and staffing for land acquisition programs and enhance public education for heritage programs. Respondents also write that that the Forest Service should use clear and precise language in the proposed plan and make specific technical and editorial changes to plan language. Some commenters say that the Forest Service should ensure consistency between the forest plan and a number of laws, policies, and directives. Some writers also say that the plans are in violation of NEPA because they do not consider an adequate range of alternatives, analyze cumulative impacts or all viable alternatives, do not disclose data and analysis, or do not provide a fair and full discussion of significant information.

#### **Alternatives**

Several commenters write that the Forest Service should develop a wider range of reasonable alternatives, including a zero-cut alternative for no timber harvesting on national forest system land.

Various writers state that the Forest Service should create an alternative that blends B-1 with C-1 and implement an alternative devised by the Nature Conservancy. Numerous writers state that the Forest Service should implement the alternative developed by the Kentucky Conservation Community.

Commenters also state that the Forest Service could achieve a better analysis of alternatives by differentiating activities and variables for each alternatives. Some writers urge the Forest Service to implement Alternative B-1 because it reduces commercial resource activity and benefits the ecosystem. Other commenters state that the Forest Service should implement Alternative C because it emphasizes ecosystem integrity, ensures recreational access, and allows timber harvest to benefit bird habitat, early successional species, and ecological processes. Numerous respondents offer multiple reasons why the preferred alternative should not be implemented.

#### **Environment**

In Chapter 3, numerous respondents ask the Forest Service to protect National Forest System lands, the environment, and flora and fauna.

Many writers say the Forest Service should conduct better environmental analysis of multiple management actions and non-forest lands in the analysis of cumulative effects. Writers comment that the Forest Service should develop buffer zones based on science while others say that the Forest Service should specify strong protections in sensitive areas such as for caves, clifflines, and riparian areas. Other respondents comment that the Forest Service should ensure that buffer areas allow the use of management equipment and travel to facilitate management of these and other areas. Some respondents state that the Forest Service should monitor and protect soils and better address stream sedimentation by establishing quantitative standards and better analyzing the effects of management actions.

Writers remarking that the Forest Service should do more to improve air and water quality as well as protect watersheds, riparian areas, and wetlands. Some also state that the Forest Service should clean up trash sites and illegal dumps. Commenters also state that the Cumberland River Watershed as well as water bodies listed under the Clean Water Act 303 (d) should be managed under Watershed Restoration or Aquatic Habitat prescriptions to reduce sediment and pollutant inputs. Some writers say that the Forest Service should not implement management restriction based on ephemeral streams. Others, however, believe the agency should expand riparian corridor widths for perennial, intermittent, and ephemeral streams as well as for lakes, ponds, and wetlands. Riparian corridor protection should be extended to the entire channel network, they recommend, including headwater streams and transitions zones, to protect riparian processes. Comments vary as to the degree of protection offered by various buffers.

While some commenters say the Forest Service should specify strong measures such as no timber harvest for multiple environmental reasons, other writers say that the Forest Service should not classify riparian acreage as unsuitable for timber production because timber harvest in these zones can benefit recreation and wildlife as well as provide revenue.

Respondents commonly state that the Forest Service should maintain the viability of federally listed, locally rare, and native species, and should enhance habitats and provide detailed, binding standards and monitoring requirements. Commenters also say that the Forest Service should consult more with the U.S. Fish and Wildlife Service regarding recent research and its implications for monitoring and species recovery plans as well as for the overall forest plan. Respondents often comment that the

Forest Service should expand the number and types of species designated as management indicator species because the current list consists of common species, and species should include those for interior and old-growth forests. Management indicator species, some suggest, should cover all landscape and habitat types, species should reflect management activities, and should include sensitive species and a variety of taxonomies and communities. Respondents commonly state that the Forest Service should monitor reptiles, amphibians, mussels, fish, cave species, aquatic macroinvertebrates, and rare species, with a variety such as that listed in the 1996 Citizens' Alternative. Writers commonly state that the Forest Service should conduct full surveys and inventories of species and their habitat to ensure species viability, to comply with National Forest Management Act, and because viability is determined by more than the presence of forest types.

Some writers comment that the Forest Service should implement the Habitat Diversity Emphasis Area prescription to maintain a diversity of wildlife species. Other respondents assert that the Forest Service should not implement the Habitat Diversity Prescription Area because early successional habitat occurs naturally via disturbance processes and such habitat is widely available on private lands. They also challenge the scientific basis for such a prescription area. Respondents comment that the Forest Service should prevent fragmentation and habitat loss to protect sensitive species as well as to promote wildlife movement and genetic diversity. Some writers say that the Forest Service should conduct viability analysis for black bear and elk, and analyze the effects of management actions on these and other demand species. Respondents also frequently state that the Forest Service should conduct realistic assessments of aquatic species viability and watershed health because erroneous assessments for rare aquatic species have been made. They also urge development of management strategies to protect and restore aquatic habitats, such as designating these areas as Watershed Restoration Areas or Aquatic Habitat Areas. Further, writers say that the Forest Service should retain large woody debris to provide habitat, nutrients, and stream structure, and restore native communities.

#### **Transportation**

The Transportation Section contains comments from respondents who advocate the decommissioning of existing roads and the prohibition of new road building on the forest, while some respondents point out the importance of forest roads and trails and the need to maintain this infrastructure.

Some writers say that the Forest Service should develop a roads inventory, establish standards for low road densities for management prescriptions, road standards, standards that reduce fragmentation, and standards to close any road that creates adverse environmental effects. Some respondents assert that the Forest Service should limit any road building, decommission "unneeded" roads, and analyze the effects and cumulative effects for any road construction. Some writers comment that the Forest Service should better maintain forest trails, post allowed and prohibited trail uses, implement education and enforcement efforts for trail use, and specify trails that will be closed.

#### Recreation

Comments relating to Recreation are quite varied. Several recreational activities on National Forest System lands, including motorized recreation, rock climbing, and recreation facility development, received attention and considerable comment from the public.

Some respondent say that the Forest Service should designate the Clifty Wilderness Area and Wolfpen Roadless Area as primitive under the Recreation Opportunity Spectrum because their clifflines and terrain establish distinct physical boundaries. Some respondents comment that the Forest Service should emphasize recreation instead of timber harvest, while analyzing the effects of recreational activities and limiting activities that create negative impacts on natural resources and other recreational experiences. Some respondents comment that the Forest Service should emphasize low-impact recreation, high-quality recreation, quality backcountry experiences and ecotourism.

Respondents state that the Forest Service should analyze the effects of off-highway vehicle use on national forest lands, with numerous respondents commenting that the Forest Service should limit or prohibit motorized recreation on national forest land because of effects on other forest goals, environmental effects, lack of agency monitoring and control, and effects of trespassers onto private property. In contrast, several writers advocate that the Forest Service should provide a spectrum of motorized recreational opportunities to better meet users' needs for more trails, longer trails, and connections between trails. There were requests associated with specific trails reflecting the desire for such trails in southeast Kentucky, the demand for motorized recreation, and the economic benefits generated by motorized users. Forest Service maintained trails would reduce illegal riding and spread use over a wider area to reduce environmental effects, it was suggested.

Writers say that the Forest Service should specify rock climbing goals, objectives, and standards in the cliffline community prescription area to reduce confusion and make regulations simpler for rock climbers to understand. Writers also offer recommended that the Forest Service should specify standards for development or modification of bouldering routes as well as for vegetation removal. They suggest provisions that would allow the maintenance or replacement of fixed anchors within existing climbing areas and the development of a quota system for overuse. Respondents state that the Forest Service should develop a climbing management plan and provide a full spectrum of climbing opportunities and manage climbing on an area basis (instead of a route-by-route approach) while providing district rangers with the discretion to approve new climbing areas, and manage climbing, bouldering, and rappelling as uniquely different activities.

Commenters also say that the Forest Service should support mountain biking as well as hunting and fishing on national forest land. They request more open areas for equestrian use, grouse management, and tourism. Some respondents assert, for multiple reasons, that the Forest Service should not develop the resort lodge and golf course at Cave Run Lake; that as a site-specific project, the resort is inappropriate for the Plan. Some also say that the Forest Service should emphasize undeveloped sites as well as little-developed or conservation-oriented facilities.

### **Special Designations and Lands**

One of the more dominant themes in the special designations section is the management and recommendations for roadless and wilderness areas.

Respondents frequently state that the Forest Service should recommend additional forest land as wilderness and add land to designated roadless areas because the remaining Eastern wildlands and ecosystems are underrepresented in the National Forest Wilderness Preservation System. Others write that the Forest Service should lessen the emphasis on wilderness and roadless areas. Respondents assert that the Forest Service should designated the Wolfpen Creek Area as a wilderness study area, and that it, the Beaver Creek Wildlife Management Area, and Redbird Ranger District be added to existing wilderness areas. Similarly, respondents state that the Forest Service

should support wild and scenic river designation for numerous river and creek segments such as segments of Red River, Marsh Creek, Cumberland, War Fork, Rockcastle, and Rock Creek. Commenters also write that the Forest Service should modify prescription goals, objectives, and standards for the Natural Arch Scenic Area, Reece Tract, and Red River Gorge Geologic Area to better protect these areas, and to designate Tight Hollow as a research natural area or as designated old-growth. Commenters also say that the Forest Service should expand the size of research natural areas, apply the same management to all research natural areas, and prohibit thinning, planting, and burning. Writers also state that the forest Service should incorporate the proposals by the Kentucky State Nature Preserves Commission and the Nature Conservancy to integrate old-growth plans.

Numerous respondents comment that the Forest Service should consolidate scattered parcels of forest land and expand the size of the forest. Respondents offer recommendations that the Forest Service should acquire rock climbing areas, cave habitat and adjoining surface watershed areas, coal lands near Pine Mountain, and high elevation acreage in mixed-mesophytic forests. Some writers also comment that the Forest Service should develop objectives for land acquisition, specify the cost for such acquisitions and how the acquisitions will affect resources, and suspend land exchanges.

#### **Natural Resources Management**

Comments on natural resource management address timber harvest, old-growth, early successional habitat, and forest health management.

Numerous respondents assert that the Forest Service should not allow timber harvest, mining, drilling, prescribed fires, herbicides and pesticides, off-highway vehicles, roads, pipelines, or other forest incursions including commercial activities, for a variety of environmental, economic, and social reasons. Some writers state that the Forest Service should only allow resource development and harvest activities on areas that have already been altered, while others comment that the Forest Service should analyze the effects of all management actions on forest resources and surrounding private lands. Some commenters say that the Forest Service should specify vegetation management actions that will be applied to specific species to comply with NEPA.

Views vary as to guiding philosophy that the agency should follow in management actions. Numerous respondents state that the Forest Service should allow nature to take its course without human intervention; focus on environmental protection and ecotourism; manage the forest for biodiversity, habitat and species conservation and restoration, environmental benefits, and low-impact recreation; should promote healthy natural forest processes and environmental sustainability; or manage the forest as a park or preserve. Some writers advocate that the forest should be managed for specific uses, while other respondents advocate that the Forest Service should manage for multiple uses to provide sustained production of forest products and services, to support the wood products industry, and to protect wildlife, recreation, water, and scenic values. Some commenters also say that the Forest Service should manage the forest under an ecosystem management approach or by adaptive management. These respondents maintain that the Forest Service should focus on outcomes that benefit forest resources and based on monitoring.

Regarding timber harvest, some writers say that the Forest Service should conduct timber harvest to benefit forest health, wildlife, and local economies. Respondents write that the Forest Service should clearly define conditions that require timber harvest for restoration and standards that guide such harvest such that restoration is not used as a euphemism for timber harvest. Similarly, commenters assert that the Forest Service should present information regarding timber harvest in a reader-

friendly fashion so as not to mislead the public on information about timber harvest and costs, and to clearly state when timber harvest will be used. Some writers argue that the Forest Service should develop a section within the plan devoted to timber management to establish the use of timber harvest as a management tool and legitimate forest use and incorporate timber research into planning.

Respondents advance that the Forest Service should clearly define "timber harvest" and "timber production" as related to designation of land as suitable/unsuitable for timber harvest, and that such classification should vary across alternatives. Some writers say that the Forest Service should increase the amount of land designated as suitable for timber harvest to provide for habitat management, while others comment that the Forest Service should not designate lands as suitable for timber harvest, particularly near clifflines, caves, riparian areas, and rare communities, and that wide buffers should be established around such areas.

Comments vary regarding the management of forest structure. Various writers say that the Forest Service should conduct all-age management to benefit forest health, provide a broad diversity of age class distributions, develop a mosaic of forest succession, move toward older forest condition, or expand and protect old-growth and future old-growth. Some commenters say that the Forest Service should restore yellow-pine forest to benefit the red-cockaded woodpecker and shortleaf pine ecosystems, while other respondents say that the Forest Service should not conduct vegetation manipulation or manage for a single species. Writers commonly comment that the Forest Service should replant harvested areas, but not as monoculture stands, nor with non-native species. Respondents also comment that the Forest Service should establish reasonable rotation ages (e.g., 100-140 years) for different timber types. Other commenters write that the Forest Service should not conduct intensive vegetation management because forests in the region were historically characterized by large tracts of interior forest land. Some commenters write that the Forest Service should clearly specify that timber harvest is appropriate within designated management prescriptions and prescription where consistent with area objectives. Other writers comment that the Forest Service should restrict timber harvest in sensitive areas.

Respondents commonly state that the Forest Service should develop specific criteria for old-growth identification, conduct inventories of old-growth, develop plans for managing old-growth, and protect and expand the amount of old-growth and future old-growth to provide for healthy ecosystems, species diversity, and system stability; and to benefit recreational users and future generations. Respondents also frequently comment that the Forest Service should use the analysis of old-growth and natural areas conducted by the Nature Conservancy and Kentucky State Nature Preserves Commission for designating old-growth. Some writers comment that the Forest Service should position old-growth and future old-growth adjacent to areas such as wilderness to provide large blocks of undisturbed forest, minimize edge, and to maintain old-growth attributes, while others point to the need for minimum size areas, linkages among areas, and designation of the White Oak and Sinking Creek areas as old-growth stands. Writers commonly state that the Forest Service should manage old-growth stands similar to wilderness and prohibit the use of burning, thinning, and timber harvest or other ground-disturbing activities. Some writers say that the Forest Service should not manage the forest for old-growth but instead should allow old-growth to float across the landscape with longer rotation ages because old-growth will affect forest diversity, increase the frequency of catastrophic events, and because pre-European settlement conditions contained understories of savannah habitat where trees were sparse.

Some commenters write that the Forest Service should increase early successional forest habitat to maintain flora, fauna, and to benefit wildlife habitat and hunting. Numerous respondents say that the Forest Service should analyze and disclose the amount of early successional habitat created by natural disturbance, and rely on natural disturbance for the creation of habitat diversity because such disturbance is natural and dynamic and artificially created habitat may be excessive.

Some respondents say that the Forest Service should allow commercial timber harvest across the forest to benefit wildlife. Those supporting timber harvest say that the Forest Service should conduct silvicultural applications and vegetation management because studies have shown that these management actions can occur without negative effects. In contrast, other writers frequently state that the Forest Service should not allow commercial timber harvest or timber harvest at all, because of multiple environmental, economic, and social reasons. Some writers comment that the Forest Service should analyze timber harvest on private land (within the forest, locally, and regionally), and the effects of the timber program on each alternative to comply with NEPA.

Some writers say that the Forest Service should conduct timber harvest to comply with law, ensure a supply of timber, provide jobs and economic benefits to Eastern Kentucky, and to generate revenue for various purposes. From an alternative perspective, respondents commonly state that the Forest Service should not conduct timber harvest because of social benefits provided by the forest, the forest contains a small percentage of the timber within the state; timber has greater value as natural habitat for future generations; and because recreation, tourism, and environmental benefits generate more revenue and public benefits than timber harvest. Respondents also frequently write that the Forest Service should not subsidize timber harvest, roads for timber harvest, and replanting.

Numerous respondents question the adequacy of various analyses. Respondents state that the Forest Service should ensure that the Continuous Inventory of Stand Conditions (CISC) data matches ground conditions and accounts for management actions and natural disturbances because SPECTRUM analyses and results are suspect. Some writers say that the Forest Service should provide a scientific basis for combining Forest Inventory Assessment (FIA) data with CISC and using FIA plots from non-forest lands. Writers also comment that the Forest Service should have analyzed additional factors, as recommended, and should disclose full descriptions and limitations of SPECTRUM, financial analyses, Forest Vegetation Simulation, Presuppose, and SETWIGS because methods appear to lack validity.

Some writers say that the Forest Service should increase the allowable sale quantity to maintain forest health and benefit communities, maintain appropriate age class distributions, and increase recreational access and opportunities. Other respondents comment that the Forest Service should reduce the allowable sale quantity because current harvests are unsustainable.

Regarding harvest methods, respondents provide comments of various methods that the Forest Service should not use. Some writers say that the Forest Service should modify cliffline standards to allow the use of equipment and timber harvest, and conduct harvest in blocks ranging from 5-40 acres, as recommended. Some writers advocate that the Forest Services should use clearcuts to benefit wildlife and habitat while other respondents state that the Forest Service should not conduct clearcuts because of environmental effects. Some writers advance that the Forest Service should use selective timber harvest and single tree selection methods. Views also contrast that the Forest Service should/should not use shelterwood harvest nor seed tree production because of multiple environmental effects. Some writers comment that the Forest Service should change

rotation ages to about 100 years, and conduct detailed analysis comparing the effects of timber harvest methods.

Regarding forest health management, respondents say that the Forest Service should clarify that forest health is a desired future condition and should define forest health. Writers comment that the Forest Service should analyze and disclose factors affecting forest health. Some respondents say that the Forest Service should manage insects that attack timber to prevent spread while other writers say that the Forest Service should not manage insects because they are a natural phenomenon and not a severe problem. Respondents commonly state that the Forest Service should control invasive and non-native species and reintroduce native plants. While some writers advocate that the Forest Service should use herbicides to eradicate non-native invasive plants, other writers maintain that the Forest Service should not use herbicides or pesticides due to multiple environmental reasons, and that the Forest Service should analyze, consider, and disclose the risks of such chemical treatments to human health the environment.

Writers state that the Forest Service should acknowledge the role of fire in ecosystems, and should use fire to restore mosaic forest types and benefit federally listed species that are fire dependent. Some also state that the agency should reduce fuels and work to protect wildland-urban interface areas. Respondents commonly state that the Forest Service should not conduct prescribed fires because of increased air pollution, environmental effects, risks to endangered species, health effects to humans, threat of fire spreading to communities, public opposition, and because fire is not needed in Eastern forests. Commenters frequently state that the Forest Service should do more to analyze the effects of prescribed fire to determine the short- and long-term effects on sensitive flora, fauna, the environment, and humans; analyze cumulative effects of fuels management; and to demonstrate the need for fire.

Some respondents comment regarding the use of other forest products and the need for alternative products to wood and forest products. Some writers say that the Forest Service should promote the use of alternative products for construction and alternative fibers to reduce waste and the need for wood products.

Respondents commonly state that the Forest Service should not allow the development and harvest of mineral resources because of multiple environmental and economic effects. Some writers comment that the Forest Service should specify that land subject to mining will be returned to predisturbance land uses and natural habitat, and provide mineral development standards to protect ecosystems and natural and special areas. Some commenters say that the Forest Service should consider alternatives that limit mineral development, and should analyze, consider, and disclose the effects of mineral development on air and water quality, underground hydrology, biological resources, cultural resources and practices, aesthetics and recreation, as well as cumulative effects. Respondents commonly state that the Forest Service should withdraw lands and prohibit mining of Federal mineral rights because of economic and ecological issues, should purchase private mineral rights under forest land, and implement restrictions on holders of private mineral rights. Writers also comment that the Forest Service should develop subsidence plans, and require vertical buffers of at least 200 feet for mining while retaining fifty percent of the coal seam to avoid changes in hydrology and subsidence. Writers also comment that the Forest Service should require an EIS for both Tract 107ab and 745. Numerous respondents state that the Forest Service should specify plans to reclaim and remediate sites, inventory inactive mines and leaching mine sites, and clean-up and restore sites. Similar issues and views are given for oil and gas development. Respondents comment that the Forest Service should not allow the withdrawal of gas or oil from the forest. Writers say that the

Forest Service should analyze, consider, and disclose effects associated with oil and gas development and hazardous materials spills. To avoid the need for such resources, several respondents comment that the Forest Service should promote sustainable energy such as solar and wind power as alternatives to coal and natural gas.

Some commenters write that the Forest Service should restrict utilities and communication sites, specify provision for placement and management, and conduct monitoring to protect water quality. Other writers comment that the Forest Service should purchase any inholding or other area any time a special use permit is issued, and should implement new goals, objectives, and standards for utility and communication corridors and sites, as specified. Similarly, writers state that the Forest Service should analyze and disclose the effects of power transmission lines and pipeline corridors, mitigation measures, and the abandonment and removal of structures.

#### **Social and Economic Values**

Comments in socioeconomic section recommend that the Forest Service do more to assist local communities and economies.

Commenters frequently raise questions about the use of IMPLAN, and state that the Forest Service should conduct valid economic analyses using valid methods and reliable data and should disclose all information such as substitution effects, associated jobs, induced jobs, input-output analysis, and income and employment multipliers. Writers also that the Forest Service should acknowledge limitations of the IMPLAN model, and show analysis by each alternative and by each separate economic activity to facilitate comparison of alternatives and meaningful public comment. Some writers say that the Forest Service should manage the forest to generate the most employment and economic benefits to local communities. In contrast, respondents frequently write that the Forest Service should analyze the economic benefits of tourism and recreation and ecosystem benefits of intact ecosystems as compared to timber production. Some commenters say that the Forest Service should conduct an economic efficiency analysis to comply with the National Forest Management Act.

### **Demographics of Commenters**

Demographic analysis presents an overall picture of commenters: where they live, their general affiliation to various organizations or government agencies, and the manner in which they comment. The database CAT uses contains public comment organized under subject categories and demographic information. This kind of database can be used to isolate specific combinations of information about public comment. For example, a report can show public comment from certain geographic locations or show comments associated with certain types of organizations. Thus demographic coding, combined with comment coding, allows managers to use the database to focus on specific areas of public concern linked to geographic area, organizational affiliation, and response format.

The number of responses on the Daniel Boone National Forest Proposed Plan Revision is as follows:

	469	original responses
	87	organized campaign responses with additional comments
Subtotal	556	responses containing original text
	+625	organized campaign responses (forms)
<b>Total all responses</b>	1181	

It is important to recognize that the consideration of public comment is not a vote-counting process in which the outcome is determined by the majority opinion. Relative depth of feeling and interest among the public can serve to provide a general context for decision-making. However, it is the appropriateness, specificity, and factual accuracy of comment content that serves to provide the basis for modifications to planning documents and decisions. Further, because respondents are self-selected, they do not constitute a random or representative public sample. The Administrative Procedures Act and Forest Service policy encourage all interested parties to submit comment as often as they wish regardless of age, citizenship, or eligibility to vote. Respondents may therefore include businesses, people from other countries, children, and people who submit multiple responses. Therefore, caution should be used when interpreting the numbers provided in this report. While demographic information can provide insight into the perspectives and values of respondents, it does not necessarily reveal the desires of society as a whole. All input is considered and the analysis team attempts to capture all relevant public concerns in the analysis process.

CAT identifies several categories for demographic purposes. Responses are the individual letters, postcards, emails, etc., received. Respondents are the individual response writers. Signatures refer to the people who signed these individual responses. The number of signatures may be greater than the number of responses as there may be more than one signature per response. Likewise, the number of total responses may be larger than the number of total respondents due to multiple submissions by the same respondents. CAT determines the number of responses received for a given project, the number of respondents, and the number of signatures.

The following demographic tables are based on the 556 original responses.

### **GEOGRAPHIC REPRESENTATION**

Geographic representation is tracked for each response. Table I - 1 displays, by origin, the number of responses and signatures. Responses were received from 34 states and 3 foreign countries. Note that 518 responses did not indicate geographic information.

Table I - 1. Number of Responses and Signatures by Origin

State <sup>21</sup>	Number of Responses	Number of Signatures
Alabama	1	1
Arizona	1	1
Arkansas	2	2
Colorado	2	2
Florida	2	2
Georgia	4	4
Idaho	1	1
Illinois	6	2,669
Indiana	16	28
Kansas	1	1
Kentucky	407	431
Michigan	2	2
Mississippi	1	1
Missouri	2	2
Montana	2	2
New Mexico	1	2
North Carolina	3	3
Ohio	13	13
Pennsylvania	5	5
South Carolina	2	2
Tennessee	9	9
Vermont	1	1
Virginia	5	5
West Virginia	2	2
Wisconsin	2	2
Response submitted by Multiple States	2	4
Anonymous/Unknown	61	68
Total	556	3261

<sup>&</sup>lt;sup>27</sup> States with no responses were omitted from table.

### **ORGANIZATIONAL AFFILIATION**

Organizational affiliation is tracked for each response. Table I - 2 displays, by organization type, the number of responses and signatures. The first box indicates respondents who wrote on behalf of themselves or those whose affiliation was unclear.

Table I - 2. Number of Responses and Signatures by Organization Type

Organization Type	Number of Responses	Number of Signatures
Business	1	1
Civic Group	0	0
County Agency/Elected Official	2	2
Federal Agency/Elected Official	5	6
Government Employee/Union	0	0
Individual	501	538
Mechanized Recreation	0	0
Mining Industry	0	0
Motorized Recreation	3	3
Multiple Use or Land Rights Organization	2	2
Non-Motorized/Non-Mechanized Recreation	1	1
Oil, Natural Gas, or Coal Industry	0	0
Other	3	3
Place-Based Group	0	0
Preservation/Conservation Organization	20	2688
Professional Association/Society	2	2
Recreation/Conservation Organization	6	7
Regional/Other Government Agency	0	0
Religious Group	0	0
State Agency/elected Official	3	3
Timber or Wood Products Industry	2	2
Town/City	0	0
Tribal	1	1
Utility Industry	2	2
Single Responses signed by Multiple Organizations	2	4
Total	556	3,265

### **RESPONSE TYPE**

Table I - 3 displays, by response format, the number of responses and signatures. The majority of responses received were original letters, followed by form letters, and then resolutions.

Table I - 3. Number of Responses/Signatures by Response Type

Response Type	Response Type	Number of Responses	Number of Signatures
1	Original Letter	469	3,169
2	Form plus	87	96
3	Resolution	0	0
4	Action Alert	0	0
6	Public Meeting Comment Form	0	0
Total		556	3,265

### **DELIVERY TYPE**

Delivery types are also tracked for each response received on the project (Table I - 4). Responses were received via postal or commercial mail, email, facsimile machine, and hand delivery.

Table I - 4. Number of Responses/Signatures by Delivery Type

Delivery Type Code	Delivery Type	Number of Responses	Number of Signatures
E	Email	192	213
F	Fax	19	20
Н	Hand delivered	1	1
M	Mail	344	3,301
Т	Telephone	0	0
Total		556	3,265

### SUMMARY OF PUBLIC CONCERNS WITH AGENCY RESPONSE

### Process, Planning, Policies, and Laws

#### **GENERAL PLANNING PROCESS**

1. Public Concern: The Forest Service should provide a quantified, site-specific approach to accomplish desired goals. The Forest Service should improve the specificity of objectives and standards.

**Response:** As explained in Chapter 1, the Plan is a programmatic document providing general direction for the future of the Daniel Boone National Forest, and therefore is not supposed to give site-specific direction. Site-specific actions are identified through an implementation strategy and documented in each project plan developed under the direction of the Revised Forest Plan. We have made minor corrections in some objectives and standards; however, we believe that the forestwide and prescription area objectives and standards are appropriate for a Forest programmatic document.

2. Public Concern: The Forest Service should attach specific objectives to each goal in the forest plan.

**Response:** Goals reflect long-term priorities. Goals help guide agency actions, even if no specific objectives are attached. Lack of a specific objective does not mean that action will not be taken toward fulfillment of the goal. For example, justification for a site-specific project could cite a goal even if no objective had been stated in the Plan. The introduction to Chapter 2 gives further explanation concerning the use of goals and objectives.

3. Public Concern: The Forest Service should develop language that enforces plan goals, objectives, and standards.

**Response:** The plan states that adherence to standards is "mandatory" (Chapter 2, Forestwide Direction). No exception can be made to a standard unless the Revised Forest Plan is amended, a process that requires public involvement and environmental analysis. Objectives give purpose and need for actions that the Forest Service should take during the planning period toward achieving goals and Desired Future Conditions. Factors such as funding, new legislation, natural occurrences, e.g. drought, flooding, blights, pests, etc., may hinder efforts to achieve goals and objectives.

4. Public Concern: The Forest Service should correct inconsistencies between planning objectives and prescriptions, objectives and prescriptions across areas, and inconsistencies with overall forest objectives.

**Response**: While the commenter did not cite specific inconsistencies, changes have been made where we have discovered inconsistencies. The prescription area strategy was followed in part to accommodate the diversity of needs and natural conditions found on the Daniel Boone. Prescription areas allow pursuit of a worthwhile objective in a localized area when that objective might not be appropriate Forestwide. Monitoring is an integral part of the Revised Forest Plan and plan amendments will be made if problems arise in conflicting direction.

**5.** Public Concern: The Forest Service should identify and provide a summary of the various laws, policies, and directives that drive development of the forest plan.

**Response:** The Forest Service has a great variety of statutory mandates to fulfill. Appendix B of the Plan contains 21 pages listing statutes with brief explanations.

## **6.** Public Concern: The Forest Service should specify standards that fully express the goals and objectives for each resource.

**Response:** Goals and objectives drive the purpose and need for activities. Standards provide protection to resources from undesirable effects by constraining or limiting such activities. However, the Plan's standards are designed to complement the entire array of goals and objectives, and must include practical "flexibility" in the achievement this array.

7. Public Concern: The Forest Service should attach conservation targets and objectives to defined areas on the ground.

**Response:** This is precisely what the Plan does. Management will vary in different areas of the Forest and within prescription areas based upon the unique qualities of each site managed.

**8.** Public Concern: The Forest Service should clearly define desired future conditions (DFC) and embody ecosystem protection, restoration, and compatible recreation.

**Response:** We believe that the DFCs have been clearly identified and explained. Ecosystem protection, restoration, and compatible recreation are provided for throughout the plan.

**9.** Public Concern: The Forest Service should demonstrate the need for change for certain (e.g. MIS) changes from the existing plan.

**Response:** The Forest 5-year review of the Forest Plan recommended adjustments to the MIS list; this need was still valid and was incorporated into the Analysis of the Management Situation. There has been no change in this need since the AMS.

#### RELATIONSHIP WITH OTHER AGENCIES

**10.** Public Concern: The Forest Service should consult with the Eastern Shawnee Tribe if Indian skeletal remains or objects are discovered during construction.

**Response:** Project-specific consultation with appropriate tribes is beyond the scope of the Forest Plan. Existing laws (such as the Native American Graves and Repatriation Act and National Historic Preservation Act) provide for consultation with tribes. We will continue to work with the Eastern Shawnee Tribe as needed.

11. Public Concern: The Forest Service should consult with all Indian tribes, whether federally recognized or not.

**Response**: The Forest Service Mission includes "listening to people and responding to their diverse needs in making decisions." We will continue to work with all cooperators and interested parties, including those federally recognized tribes. Law requires consultation with federally recognized tribes. Beyond that, other tribes can participate in the planning process similar to any individual, organization, or agency.

**12.** Public Concern: The Forest Service should follow appropriate procedures and provide copies of the land and resource management plan and NEPA documents to the U.S. Department of Interior.

**Response:** Enclosure 4 of the department's comment letter was not received before the close of the Draft comment period. Cooperating Agencies within the U. S. Department of the Interior were provided copies and briefings by the Daniel Boone National Forest as requested. Enclosure 4 will be followed with the release of the Final Plan and EIS.

13. Public Concern: The Forest Service should acknowledge existing special use permits issued to the Army National Guard, and specify provisions for issuance of future special use permits, as recommended. The Forest Service should modify plan text, as recommended, to specifically allow military training.

**Response:** Specific memoranda of agreements or special use authorizations are not addressed in this programmatic document. Clarification has been made where appropriate.

### **ROLE OF INTEREST GROUPS**

**14.** Public Concern: The Forest Service should bring various interest groups together in the planning process.

**Response:** Every effort was made to include interested groups and individuals. The Forest has carried out a collaborative process in determining what the public wants to see in this plan. Issues were discussed openly and debated at a variety of times and places. Public involvement efforts are summarized in Appendix A of the FEIS.

**15.** Public Concern: The Forest Service should not allow environmental groups to overly influence the forest plan revision. The Forest Service should not manage national forests in a manner that favors industry groups. The Forest Service should protect the Daniel Boone National Forest from commercial interests.

**Response:** The responsible official (The Regional Forester in the case of this EIS) must consider comments from all interested agencies, tribes, groups, organizations, and individuals. The decision, which is documented in the Record of Decision, must be based on a determination of the Net Public Benefit of the action. The "Rationale for the Decision" in the Record of Decision documents the decision.

#### PUBLIC INVOLVEMENT/COMMUNICATION

**16.** Public Concern: The Forest Service should provide adequate information to the public.

**Response:** The Draft EIS and Proposed Plan have been provided to the public for comment so that any gaps in information can be identified. We have added additional information where needed.

17. Public Concern: The Forest Service should consider public comments carefully and accept additional comments.

**Response:** The Forest provided many opportunities for involvement by making available the draft documents, taking comments for at least 90 days, holding meetings, and analyzing all comments. The first part of this appendix provides a summary of the process that was used to evaluate and consider public comments on the DEIS and Proposed Revised Forest Plan.

18. Public Concern: The Forest Service should maintain opportunities for the public to engage and connect with the forest.

**Response:** Public involvement opportunities during implementation of the Forest Plan are beyond the scope of this analysis. Public involvement will remain a part of project-level planning as required by law. We will continue to work with our cooperators and the public.

## **19.** Public Concern: The Forest Service should specify results of public opinion polls and surveys on Daniel Boone National Forest issues within the forest plan.

**Response:** Public opinion polls are utilized in the analysis as appropriate. For example, the results of a recent Forest Service poll of residents living within 75 miles of the Daniel Boone National Forest are described in the socio- economic analysis (EIS, Chapt. 3) and are based upon the specific questions asked and in the appropriate context.

### **20.** Public Concern: The Forest Service should develop alternatives that are responsive to public concerns.

**Response:** All comments from interested parties were considered in the development of alternatives.

#### 21. Public Concern: The Forest Service should use and follow public input.

**Response:** All comments from all interested parties were considered. The preferred alternative was announced on May 8, 2003 and the 90-day comment period began on May 16. We are responding to the comments received from May 16, to August 14, 2003 at this time.

## **22.** Public Concern: The Forest Service should initiate a new comment period if the final plan is significantly different than the proposed plan.

**Response:** Direction for considering and responding to comments on the Draft EIS is found in the Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act. We are following that direction and do not believe that a new comment period is necessary or warranted.

## **23.** Public Concern: The Forest Service should not use the Content Analysis Team in Utah to analyze public comment for the Daniel Boone Forest Plan Revision.

**Response:** Daniel Boone National Forest personnel read all of the comments and an appropriate response has been made. The Content Analysis Team is comprised of Forest Service personnel who are specifically trained in content analysis. The Content Analysis Team helped us categorize, organize, and sort the thousands of comments received during the comment period.

### **24.** Public Concern: The Forest Service should schedule additional public meetings on the forest plan revision in each of the communities around the forest.

**Response:** Meetings were scheduled based upon travel distances and past public participation at public meetings. Additional details of the public involvement process can be found in Appendix A of the EIS.

### **25.** Public Concern: The Forest Service should extend the comment period for the Daniel Boone Forest Plan revision.

**Response:** Direction for considering and responding to comments on the Draft EIS is found in the Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act. The Forest provided many opportunities for involvement by making available the draft documents, taking comments for 90 days, holding open houses around the eastern half of Kentucky, and providing numerous briefings to various interests. We do not believe that an extension of the comment period was necessary or warranted.

#### **COLLABORATIVE PLANNING**

**26.** Public Concern: The Forest Service should educate private landowners to utilize land use practices that complement and enhance the health of the forest and ecosystems. The Forest Service should demonstrate forestry practices that can be used by non-industrial private forest owners.

**Response**: State and Private Forestry (S&PF) is one of the three branches of the Forest Service. In the Southern Region the State and Private Forestry Team cooperatively works with state forestry agencies to promote and support resource management and conservation in rural and urban areas.

Another branch of the USDA Forest Service, in the Southern Region is the Southern Research Station. The Southern Research Station's mission is to create the science and technology needed to sustain and enhance southern forest ecosystems and the benefits they provide.

The National Forest System is a branch of the USDA Forest Service responsible for on-the-ground land management of the National Forest System lands. Working in partnership with Research and S&PF provides opportunities to implement strategies that can then be shared with other agencies, professionals, and private landowners. This type of collaboration is expected to continue. Through the efforts of the state agencies and the branches of the Forest Service, private landowners should have at their disposal the technology and resources necessary to complement and enhance ecosystems adjoining the Daniel Boone National Forest

#### 27. Public Concern: The Forest Service should balance the need of all stakeholders.

**Response:** The EIS documents the consideration of a range of alternatives that provide different balances of resource management and public use. The Regional Forester, as the responsible official, selects the alternative that he believes provides the most appropriate balance. Please refer to the Record of Decision for the rationale for the Selected Alternative.

**28.** Public Concern: The Forest Service should explain how forest planning activities were coordinated with in-holders.

**Response:** We have added a statement to Appendix A of the FEIS that explains how adjacent landowners were notified.

29. Public Concern: The Forest Service should better collaborate with private landowners.

**Response:** Collaboration with private landowners is a normal part of day-to-day operations and implementation of the Revised Forest Plan. During the revision of the Forest Plan, landowners were afforded the same opportunity to be involved as other members of the public. The public involvement opportunities for this planning effort are described in Appendix A of the FEIS.

#### **BEST AVAILABLE SCIENCE**

**30.** Public Concern: The Forest Service should use the best available science for the forest plan. The Forest Service should ensure that the Riparian and Cliffline Management Prescriptions are based on sound science and Forest Service research. The Forest Service should cite non-Forest Service, peer-reviewed, scientific studies that have been conducted on the Daniel Boone National Forest.

**Response:** We believe that the best available science was used. Peer-reviewed, scientific studies that have been conducted on the Daniel Boone National Forest and considered in preparing the EIS and Plan are cited.

### **31.** Public Concern: The Forest Service should have plan documents peer-reviewed by independent scientists.

**Response:** A broad range of interested groups and individuals were requested to review our plan documents during the comment period. Several scientists outside of the Forest Service responded.

### **32.** Public Concern: The Forest Service should provide a scientifically accurate picture of current forest conditions.

**Response:** We believe that the best available data was used to provide a reasonable picture of the forest, as required to compare the significant effects of the alternatives.

### **ADEQUACY OF ANALYSIS**

## **33.** Public Concern: The Forest Service should focus more attention on the forest's role in the state and region.

**Response:** Attention was given to the Forest's role in the various physiographic regions, the proclamation area, or in other larger analysis areas appropriate for each resource or program.

#### 34. Public Concern: The Forest Service should provide more complete and accurate information.

**Response:** A large volume of information is presented and addressed in the EIS for each program area and under each component of the environment. We believe we have provided the most accurate information available to us to address the issues and effects to the environment.

# **35.** Public Concern: The Forest Service should conduct and provide more adequate environmental effects analysis.

**Response:** Most comments concerning this public concern asked for analysis beyond the scope of this document, which will be considered at the project level. Forestwide and prescription goals, objectives and standards create guidance and constraints that were considered in determining the significance of effects and the need to address these effects.

#### **36.** Public Concern: The Forest Service should conduct and provide more cumulative effects analysis.

**Response:** Cumulative effects are addressed in Chapter 3 of the EIS under the program or resource affected.

#### 37. Public Concern: The Forest Service should provide current data on forest vegetation.

Response: The Forest's vegetation database (CISC) is updated continuously on a 10-year cycle, and as soon as possible when changes in classification are known to occur (Proposed Revised Plan, p. 3-263). There will always be some information in the database that is up to 10 years old, however. When catastrophic changes occur, such as the southern pine beetle outbreak, satellite photos and ground surveys are used to make adjustments.

# **38.** Public Concern: The Forest Service should explain why the Continuous Inventory of Stand Conditions is the best system for monitoring forests.

**Response:** The Continuous Inventory of Stand Conditions (CISC) is a database that contains information about the general attributes or characteristics of the vegetation within each stand polygon. This data has been used for most ecosystem landscape planning. Additional inventories (of various design) have been used once a proposal is made for an activity. Detailed timber inventories and appraisals are required prior to timber sales. CISC (or its successor) is only one of many databases that will be helpful in monitoring (see Appendix D of the Revised Forest Plan).

## **39.** Public Concern: The Forest Service should ensure that Continuous Inventory of Stand Conditions data matches current ground conditions and accounts for natural dynamics.

**Response:** As explained in the EIS (Chapter 3, Timber Production), the data was adjusted to reflect the effects of the mortality caused by the recent pine beetle outbreak. As in all data, standard error in precision and accuracy decreases with increasing sample intensity and other factors that increase costs. Depending on how the information is used, highly accurate results (higher costs) may not be necessary. CISC is a reasonable representation of ground conditions for the Daniel Boone National Forest.

# **40.** Public Concern: The analyses should include reasonably foreseeable natural disturbances, and consider change in revenue due to cut and leave or harvest during uneconomical periods.

**Response:** The yield tables include, in effect, a built-in reflection of natural disturbance for those stands that receive a minor amount of disturbance. In addition, we have assumed a one percent level of natural disturbance that could cause enough damage to initiate stand level early succession. Assuming that much of this might be salvaged in the same way that has occurred in the past, historical stumpage prices should also reflect this effect. Beyond these considerations, we cannot reasonably foresee future disturbances, nor future "uneconomical" periods.

# **41.** Public Concern: The Forest Service should provide a scientific basis for combining Forest Inventory and Assessment (FIA) data with Continuous Inventory of Stand Conditions as well as using FIA plots from distant lands.

**Response:** FIA plots were used to build the yield tables because it is the only large database of detailed tree-level information available for the area centered around the Daniel Boone National Forest [see FEIS, Appendix B, Forest Activity Scheduling Model (Spectrum)]. This was the best information available for these estimates.

### **42.** Public Concern: The Forest Service should not bias Risk Rating modeling to support analysis of timber harvest over other uses.

**Response**: The model is based on vegetative condition (age, species composition, stand condition, and site index). Modeling took into consideration activities likely to occur that would result in change to the vegetative condition, whether or not the predicted change would occur because of logging operations.

# **43.** Public Concern: The Forest Service should have analyzed additional factors during Spectrum modeling.

**Response:** Data at the level of detail that is available in the Forest's vegetation database (CISC) is not available from adjacent private lands; therefore, Spectrum analysis of these lands would not be possible. Analysis of soils is better accomplished in other than the Spectrum model (see FEIS, Appendix B, Sediment Yield and Cumulative Effects model). Factors that were significant to the spectrum analysis were considered in that analysis.

## **44.** Public Concern: The Forest Service should make descriptions of Spectrum modeling reader friendly.

**Response:** Explanations in Appendix B of the EIS are as readable as possible. Explanations for the development of yield tables and of the procedures for preparation and the running of a linear program are not simple. Linear programming is a mathematical problem-solving technique that cannot be easily explained in a brief appendix. Some understanding of the complexity of linear programming can be found at the following website: http://www-unix.mcs.anl.gov/otc/Guide/faq/linear-programming-faq.html

**45.** Public Concern: The Forest Service should not use Spectrum modeling as an operational model because Spectrum is intended to be a strategic model and resulting numbers are questionable.

**Response:** We are using Spectrum as a strategic model. The numbers are useful as a relative comparison between alternatives.

**46.** Public Concern: The Forest Service should provide clear details as well as scientific evidence and references to support methods used in the Forest Vegetation Simulator, Presuppose, and SETWIGS for determining suitability.

**Response:** The Spectrum model containing Forest Vegetation Simulator results (see discussion in EIS Appendix B) was used in the Stage 2 Suitability Analysis. As explained in the EIS [Chapter 3, Timberland Suitability Analysis (Stage 2)], the results of the Stage 2 analysis are used in the Stage 3 process. In Stage 3, during the formulation of alternatives, the results of the Stage 2 analysis were considered but had no bearing on the final suitability classifications. Additional discussion concerning Spectrum and timber costs and revenues has been added to FEIS in Appendix B. SETWIGS does not apply to our analysis and was not mentioned in the text

**47.** Public Concern: The Forest Service should provide details, as requested, for analysis of gross receipts and related financial analysis.

**Response:** Average timber values were determined from the data we had available at the time of the analysis (1985-1996). "Purchaser road credits" and the "interest and penalties paid by the purchaser through the life of a sale" were not included in the estimates of the timber revenues used in the Spectrum model or the PNV calculations. The Forest Service no longer issues purchaser road credits. However, the costs of construction of timber roads were included in the Spectrum analysis. The environmental effects of timber harvesting are described in Chapter 3 of the FEIS.

### MAPS/INVENTORIES/GEOGRAPHIC INFORMATION SYSTEMS (GIS)

**48.** Public Concern: The Forest Service should improve the detail and quality of maps included with the proposed plan and DEIS.

**Response:** We have changed some of the maps and added additional maps. More detailed geographic information is available at the Forest Supervisor's office.

**49.** Public Concern: The Forest Service should include the land ownership map associated with Objective 13.2.C.

**Response:** Objective 13.2.C states that the map is available in the Regional Office, the Forest Supervisor's Office and each Ranger District office. If unable to visit any of these locations, a copy can be mailed upon request.

#### **AGENCY ORGANIZATION AND FUNDING**

**50.** Public Concern: The Forest Service should better integrate the different disciplines within the agency.

**Response:** All relevant disciplines were represented on the Interdisciplinary Team. The Interdisciplinary Team met as small groups as well as a full team and with the Forest Management Team to develop the plan. Organizational structure is outside the scope of the Revised Forest Plan.

**51.** Public Concern: The Forest Service should provide more funding and staffing for land acquisition programs. The Forest Service should adequately fund trail maintenance and law enforcement. The Forest Service should state that vegetation management will be accomplished through income producing utilization and that user fees will support recreation.

**Response:** The plan does not determine staffing nor fund programs. The Plan is a programmatic planning document providing general direction for the future of the Daniel Boone National Forest.

**52.** Public Concern: The Forest Service should not base the forest budget on timber harvest.

**Response:** Although the budget determines the level of Forest Plan implementation, the budgeting process is outside the scope of the Revised Forest Plan. Timber sale preparation and administration is only one of the many individual program allocations made to the Daniel Boone National Forest each year.

**53.** Public Concern: The Forest Service should disclose the costs and sources of funding for the proposed plan.

**Response:** See Appendix B of the FEIS for estimated costs. Sources of funding will vary based on annual appropriations.

#### **EDITORIAL OR TECHNICAL COMMENTS/CORRECTIONS**

54. Public Concern: The Forest Service should use clear and precise language in the proposed plan.

**Response:** Changes have been made where we have discovered a need to improve the language or clarity. Additional entries were also added to the glossaries.

**55.** Public Concern: The Forest Service should make technical/editorial changes to the proposed plan, as recommended.

**Response:** Changes have been made where appropriate for clarification. Standard 1C-Veg-2 has been reworded for clarification.

**56.** Public Concern: The Forest Service should clarify the acronym "ORV."

**Response:** There are two common usages of this acronym. Outstandingly Remarkable Values is the basis for recommending a river for national wild and scenic river status. In most places in the text we have used the term off-highway vehicle (OHV) instead of off-road vehicle (ORV).

**57.** Public Concern: The Forest Service should include the Ohio Climbers Association, Inc. on the list of businesses and organizations that received a copy of the document.

**Response:** The FEIS has been corrected to include the Ohio Climbers Assocation.

# **58.** Public Concern: The Forest Service should provide details of management prescriptions that were excluded from the proposed plan.

**Response:** The prescription areas not used in any alternative are not listed in the EIS. They were provided to the public at the appropriate time for the public to consider when providing input as alternatives were constructed. This information is available in the project record.

**59.** Public Concern: The Forest Service should correct details on the chart in the DEIS (3-104) concerning vegetation, biological communities, and habitat associations.

**Response:** This error has been corrected.

#### FOREST SERVICE DIRECTIVES AND POLICIES

**60.** Public Concern: The Forest Service should develop a "911" type of communication system for environmental crises.

**Response:** Communication systems are administrative programs that are beyond the scope of a forest plan. Environmental crises that pose an immediate threat to human health and safety can always be reported through local law enforcement officials, who can contact Forest Service law enforcement officers if such contact is necessary.

**61.** Public Concern: The Forest Service should make the proposed plan consistent with regional directives related to watershed management.

**Response:** Watershed management direction in the Plan is consistent with regional direction and policy.

**62.** Public Concern: The Forest Service should write Environmental Assessments in accordance with Code of Federal Regulations 219 and 1500, 16 United States Code 1600.

**Response:** This is a legal requirement for actions subject to compliance with the National Environmental Policy Act. The two specific project proposals referenced in the full comment are not related to the plan revision.

**63.** Public Concern: The Forest Service should make the proposed plan consistent with the Forest Service Manual.

**Response:** Changes have been made in the Revised Forest Plan where errors that made it inconsistent were identified.

**64.** Public Concern: The Forest Service should implement the proposed Planning Rule.

**Response:** The plan revision process started with the 1982 planning regulations and the 1982 planning rule was used in the final development of this plan. The proposed Planning Rule has been withdrawn by the Forest Service pending its revision.

### LEGAL/ ENFORCEMENT (GENERAL)

**65.** Public Concern: The Forest Service should implement and defend the final Land and Resource Management Plan.

**Response:** We agree. It is also important to keep in mind that the Revised Forest Plan is intended to be adaptive and will be amended as the need is recognized. Chapter 5 of the Revised Forest Plan addresses how the Plan will be implemented and kept current.

66. Public Concern: The Forest Service should punish individuals that break environmental laws.

**Response:** People who break the law will be dealt with appropriately through our legal and administrative system.

#### FEDERAL LAWS / ACTS

**67.** Public Concern: The Forest Service should state that timber products will be produced in accordance with the Organic Act and Weeks Act.

**Response:** It is not necessary for a forest plan to reiterate the law. Actions to implement the Revised Forest Plan must comply with applicable laws and regulations, as well as with the Plan itself. Appendix B of the Revised Forest Plan lists most of the statutes under which the Daniel Boone National Forest must operate. Singling out portions of only two of these many important statutes is inappropriate.

**68.** Public Concern: The Forest Service should revise the proposed plan and DEIS to comply with the National Environmental Policy Act (NEPA).

**Response:** The preparation of the Draft and Final EIS has complied with the requirements of NEPA. Cumulative effects were considered for each alternative based upon all of the standards and guidelines found in the plan and in Forest Service handbooks and manuals. In addition, a Biological Opinion has been completed for the Revised Forest Plan. Supporting documents are available.

**69.** Public Concern: The Forest Service should comply with the National Forest Management Act by maintaining viable populations of species and conserving the full range of fish, wildlife, and ecological processes. The Forest Service should implement a strong Aquatic Conservation Strategy to forestall the decline of species and prevent the need to utilize the protections of the Endangered Species Act.

**Response:** The Revised Forest Plan provides for at least the minimum habitat requirements for all species, terrestrial and aquatic, known to be present on the forest.

**70.** Public Concern: The Forest Service should comply with the National Forest Management Act by addressing research questions within the proposed plan, as recommended.

**Response:** We considered your recommendations. The Revised Forest Plan research needs are not intended to be all-inclusive. The research needs listed in the Revised Forest Plan are representative of research needs that could address the programmatic direction the Plan provides. Through monitoring of the Plan, additional research needs can be addressed.

## 71. Public Concern: The Forest Service should acknowledge that the plan moves away from multipleuse management.

**Response:** Comment noted. The Revised Forest Plan provides for an appropriate balance of multiple uses of the Daniel Boone National Forest.

#### 72. Public Concern: The Forest Service should manage forests for multiple uses.

**Response:** The Revised Forest Plan complies with the Multiple-Use Sustained-Yield Act and is consistent with the agency's multiple-use mission (see Appendix B of the Revised Forest Plan).

# **73.** Public Concern: The Forest Service should work with the U.S. Fish and Wildlife Service regarding Forestwide standards for wildlife. The Forest Service should work with the U.S. Fish and Wildlife Service regarding monitoring of proposed, endangered, threatened, and sensitive species.

**Response:** The U. S. Fish and Wildlife Service has been involved throughout development of the Revised Forest Plan. Consultation with the U.S. Fish and Wildlife Service is required under the Endangered Species Act. Future involvement will occur during Plan implementation through project planning. A close working relationship between the agencies is expected to continue.

# **74.** Public Concern: The Forest Service should initiate informal consultation with the Fish and Wildlife Service under Section 7 of the Endangered Species Act.

**Response:** Federal law, specifically the Endangered Species Act, requires consultation with the U.S. Fish and Wildlife Service for all federally listed species, those proposed for federal listing and proposed or designated critical habitat. All federal actions on the Daniel Boone National Forest, including the Revised Forest Plan, will receive consultation as required by law. Sensitive species have no consultation requirement or status under the Endangered Species Act. Formal consultation was conducted for the Indiana bat and documented in a Biological Opinion, which is part of the process records.

# **75.** Public Concern: The Forest Service should include species with special habitat needs, threatened and endangered species, and locally rare species as MIS, to ensure species viability and comply with NFMA.

**Response:** NFMA does not require us to select threatened and endangered species as MIS. We are required to *consider* them; we did and found none to be appropriate under the conditions outlined in the regulations. Selection criteria are provided in the MIS Selection Process record in Appendix B of the FEIS.

### **Alternatives**

### **ANALYSIS OF ALTERNATIVES**

# **76.** Public Concern: The Forest Service should explain why values for recreation and wildlife are constant across alternatives and disaggregate visitor days/expenditure and visitor days by recreation type

**Response:** Values of recreation and wildlife were initially evaluated by activity and then aggregated for the forestwide programmatic evaluation. The differences are not significant because most of the recreation facilities are in place and will be either maintained in the future or modified to meet changing demand. Additional recreation improvements are not specifically proposed in any of the alternatives because of predicted funding levels. A site on the Morehead District has been identified as being appropriate for development of a recreation lodge and associated facilities, but any proposals that are received would undergo project-level public involvement and environmental analysis before any decision on development is made.

#### 77. Public Concern: The Forest Service should conduct better analysis of the alternatives.

**Response:** Comment noted. The analysis of alternatives is consistent with the requirements of the forest planning process and is adequate for the Responsible Official to use in making a decision.

# **78.** Public Concern: The Forest Service should differentiate between Alternative B-1 and the other alternatives in terms of (species habitat relationship) risk rating.

**Response:** Please see the Viability section in Chapter 3 of the FEIS. The model used determines the risk rating based on a combination of species rarity and habitat rarity. *Either* of these, or both, can elevate a species/habitat relationship to a very high, high or moderately high risk rating. In this case, the difference in habitat amount among alternatives was not enough to change the category. Species rarity for the four species involved put all alternatives at the same risk level. This is presented in the FEIS.

# 79. Public Concern: The Forest Service should differentiate between Alternative B-1 and the other alternatives in terms of old-growth.

**Response:** Old-growth is not limited by natural conditions on the ground, but it is limited in current occurrence. See Fish and Wildlife Management and Old-Growth in Chapter 2 and Vegetation Cover and Old-Growth in Chapter 3 of the FEIS for a discussion of the amount of older stands predicted on the forest in future years.

# **80.** Public Concern: The Forest Service should analyze the effects of the alternatives on proposed, endangered, threatened, and sensitive species.

**Response:** Programmatic effects analysis of alternatives appears in Chapter 3 of the FEIS, and is further documented in the Biological Assessment and the Biological Evaluation, which are part of the process records and available for inspection upon request. More site-specific analysis of all effects to proposed, endangered, threatened, and sensitive species depends on individual project level analysis and consultation with the U.S. Fish and Wildlife Service.

#### **ALTERNATIVE B-1**

**81.** Public Concern: The Forest Service should implement Alternative B-1.

**Response:** Comment noted. The Selected Alternative is identified in the Record of Decision, along with the rationale for its selection.

#### **ALTERNATIVE C**

**82.** Public Concern: The Forest Service should implement Alternative C because it places ecosystem integrity and protection as high priorities.

**Response:** Alternative C and Alternative C-1 (preferred alternative) are nearly identical as far as ecosystem integrity and protection (FEIS, Chapter 2). The Selected Alternative is identified in the Record of Decision.

### **ALTERNATIVE C-1 (PREFERRED ALTERNATIVE)**

83. Public Concern: The Forest Service should not implement the proposed Plan, because the Daniel Boone National Forest is only a small portion of Kentucky's forest resources and an even smaller fraction of the total landscape. The Plan does not protect the natural forest environment and its resources; therefore consumptive use of national forest resources cannot be justified.

**Response:** The Revised Forest Plan is designed to sustain and enhance the Forest's resources while providing for multiple human needs (Revised Forest Plan, Chapter 1, Mission of the Daniel Boone National Forest). Provision for "multiple uses" to meet "human needs" such as energy sources and raw materials has been mandated by the "people's" representatives in Congress. Environmentally sound reforestation takes place after timber is harvested on National Forest System land, which is not always the case on private land.

**84.** Public Concern: The Forest Service should implement Alternative C-1.

**Response:** It is the preferred alternative. The Selected Alternative is identified in the Record of Decision.

**85.** Public Concern: The Forest Service should not implement the preferred alternative, because it fails to address public concerns and because the analysis is biased.

**Response:** Public concerns have been addressed through the comparison of alternatives. No single alternative would please everyone and address all concerns. Although it could be disputed that all analysis has some bias, we are not aware of bias within the documents and have tried to be as objective as possible.

**86.** Public Concern: The Forest Service should not implement the preferred alternative, because Alternative C-1 does not adequately emphasize the role of the transportation system.

**Response:** As indicated in Forestwide Goal 12, roads are more of a tool to help meet desired future conditions than a goal or objective for the landscape.

87. Public Concern: The Forest Service should not implement the preferred alternative, because it reduces public access and recreation.

**Response:** This was not the conclusion of the EIS (Chapter 3, Recreation). Also see Forestwide objectives and Appendix C in the Revised Forest Plan.

**88.** Public Concern: The Forest Service should not implement the preferred alternative, because it does not adequately respond to forest health and fragmentation issues.

**Response:** Early in the planning process, forest health and fragmentation were identified as two of the 14 "significant issues" facing the Daniel Boone National Forest. Alternatives were developed and then evaluated according to how well they addressed all 14 issues (see FEIS Chapter 2). Alternative C-1 is preferred because it was deemed to be not only "adequate" but best overall in addressing the issues. The Revised Forest Plan gives general direction for forest health (Goal 2).

#### **ALTERNATIVE E-1 / ALTERNATIVE A**

**89.** Public Concern: The Forest Service should implement either Alternative A or Alternative E-1, or a combination of the two alternatives.

**Response:** Both alternatives were considered. The Selected Alternative is identified in the Record of Decision along with the rationale for its selection.

**90.** Public Concern: The Forest Service should implement Alternative E-1, because it emphasizes quality and quantity of products.

**Response:** This alternative was considered. The Selected Alternative is identified in the Record of Decision along with the rationale for its selection.

**91.** Public Concern: The Forest Service should not implement Alternative E-1, since it places an emphasis on short-term resource extraction.

**Response:** Alternative E-1 is not the preferred alternative. The Selected Alternative is identified in the Record of Decision along with the rationale for its selection.

#### RECOMMENDATION FOR OTHER ALTERNATIVES

**92.** Public Concern: The Forest Service should consider the Kentucky Conservation Community's Alternative.

**Response:** All points made in this proposal were considered in the development of the range of alternatives.

93. Public Concern: The Forest Service should provide a wider range of alternatives.

**Response:** The range of alternatives was adequate to address the various aspects of each issue. Alternatives considered in detail complied with the mandates of the National Forest Management Act, the Multiple Use-Sustained Yield Act, and the Endangered Species Act. Chapter 2 of the FEIS describes alternatives that were considered but dropped from detailed analysis.

**94.** Public Concern: The Forest Service should consider an alternative that blends Alternative B-1 with Alternative C-1, as a compromise.

**Response:** Various ranges were considered. Evaluating an additional alternative, as proposed, would not add or detract from the comparison already presented.

#### 95. Public Concern: The Forest Service should adopt a new alternative: "Alternative C-2."

**Response:** Various ranges were considered. Evaluating an additional alternative, as proposed, would not add or detract from the comparison already presented. The suggested alternative appears to be similar to alternative C-1.

### **Environment**

#### **GENERAL ENVIRONMENT**

**96.** Public Concern: The Forest Service should develop buffer zones for resources based on science. The Forest Service should develop buffer zones without loopholes so that resources will be protected. The Forest Service should implement appropriate regulatory restrictions for clifflines and riparian areas.

**Response:** We established prescription areas (management zones) rather than buffer zones. Within these management zones, the Revised Forest Plan provides specific direction to achieve the desired future condition.

**97.** Public Concern: The Forest Service should compare sites and design special management areas more intensively for old-growth and rare communities.

**Response:** Information from cooperative efforts was used to develop and consider both old-growth and rare communities. However, it was not the only consideration.

98. Public Concern: The Forest Service should address the effects of air and water pollution.

**Response:** Environmental consequences associated with air and water resources are addressed in Chapter 3 of the FEIS under "Air Quality" and "Soil and Water."

**99.** Public Concern: The Forest Service should provide more detail in desired future conditions, explain how uses and conditions relate to each other, describe the management of uses, and direct immediate attention, as recommended.

**Response:** This is what we attempted to do. The desired future condition narratives provide an overview of what implementation of the associated goals, objectives, and standards should look like to visitors. These overviews are necessarily general because of the diversity of conditions encountered when implementing the management direction.

#### SOILS AND SEDIMENTATION

**100.** Public Concern: The Forest Service should monitor and protect soils.

**Response:** The Revised Forest Plan, along with the Forest Service Manual and Handbooks, provide for an appropriate level of protection of soils. We cannot agree with the commenter's definition of *Significant* as being the minimum level of change.

### **101.** Public Concern: The Forest Service should better address sedimentation of streams in areas to be cut.

**Response:** Sedimentation projections at a programmatic scale are described for each alternative in Chapter 3 of the FEIS. Specific locations where activities are proposed will be determined within each site-specific analysis. Specific sediment production will be adequately addressed at that time.

# **102.** Public Concern: The Forest Service should provide quantitative figures for Objectives 1.6.A. and 1E-Obj-5A.

**Response:** Stream sediment levels naturally vary based on physical and environmental factors (e.g. size of watershed, rainfall intensity). Sediment transport will be monitored (Revised Forest Plan, Appendix D – Task 49) and site-specific analysis will determine if these levels exceed what is deemed to be a normal range (or desired future condition) for each site.

### **103.** Public Concern: The Forest Service should explain why sediment levels don't vary by watershed and alternative.

**Response:** The sediment levels do vary between alternatives but the species-sediment load relationship or index (SSI in the FEIS) does not change. This is disclosed in the description of environmental consequences for each alternative, found in Chapter 3 of the FEIS.

## **104.** Public Concern: The Forest Service should explain why active manipulation is necessary for sustaining aquatic species diversity in Alternative B-1.

**Response:** Any active manipulation that is not for the protection of humans or a legal obligation of the Forest Service could not take place under Alternative B-1 (EIS, Chapter 3). Activities that would be legally necessary would include any that protect and maintain proposed, threatened, endangered, and sensitive (PETS) species; e.g., removal of nonnative invasive species, aquatic species re-introduction, prescribed fire, and the creation of snags and cavity trees. Manipulation that could benefit aquatic proposed, endangered, threatened, and sensitive species could include removal of non-native invasive species, addition of large woody debris to streams, stabilizing disturbed stream banks and crossings, etc.

# 105. Public Concern: The Forest Service should provide data on the precision of sediment models, and provide conclusions concerning the protection of watersheds, species, and resources.

**Response:** As indicated in the DEIS and Appendix B (Sediment Yield and Cumulative Effects Model), the model was used to provide a useful comparison between alternatives, but is (as are most models) only a broad or rough estimate of the real world. Due to the variability of watersheds as well as other geographic and fluctuating climatic conditions, it is unlikely that any sediment model will ever be extremely accurate. Conclusions concerning the comparison of all effects, which are displayed in Chapter 2 of the FEIS, will be made in the Record of Decision.

## **106.** Public Concern: The Forest Service should analyze and address soil stability and regeneration capacity, as recommended, for mineral development.

**Response:** Chapters 2 and 3 of the Revised Forest Plan, along with the Forest Service Manual and Handbooks, provide for the protection of soils. The recommended analysis is beyond the scope of a programmatic document such as a forest plan. Analysis will be conducted at the project level based upon the characteristics of sites subject to the effects of a particular project.

## **107.** Public Concern: The Forest Service should demonstrate how prescriptions, mitigation measures, and monitoring would reduce erosion associated with habitat manipulation.

**Response:** Chapters 2 and 3 of the Revised Forest Plan, along with the Forest Service Manual and Handbooks, provide for the protection of soils. The recommended analysis is beyond the scope of a programmatic document such as a forest plan. Analysis will be conducted at the project level based upon the characteristics of sites subject to the effects of a particular project.

## **108.** Public Concern: The Forest Service should explain how vegetation management relates to stabilizing banks.

**Response:** The examples of vegetation management in the FEIS (Chapter 3) are: prescribed fire, creation of snags, planting, control of non-native invasive species, etc. Some of these would contribute directly to bank stabilization and others would not, depending on where in the "areas adjacent to aquatic habitats" the activity took place.

#### 109. Public Concern: The Forest Service should implement stringent regulations to stop erosion.

**Response:** Chapters 2 and 3 of the Revised Forest Plan, along with the Forest Service Manual and Handbooks, provide for the protection of soils. Additional protections will be recommended (if needed) at the project level based upon the characteristics of sites subject to the effects of a particular project.

### 110. Public Concern: The Forest Service should implement and aggressively enforce Objective 12.1.

**Response:** It is our intent that all Objectives will be pursued. Available funding and other considerations will influence the rate of progress in achieving Objectives.

## 111. Public Concern: The Forest Service should modify Objective 12.1.A and conduct unit monitoring and analysis of sediment at least every five years.

**Response:** In conjunction with the Kentucky Watershed Management Framework the Daniel Boone National Forest has been conducting a broad scale basin-wide analysis every 5 years. Monitoring and site specific analysis may be done more frequently. Unit analysis (such as watershed or landscape) will be conducted as often as budget and personnel constraints will allow. However, it is unlikely that this will occur on less than a 10-year cycle.

# **112.** Public Concern: The Forest Service should designate slopes of 11-45 percent as unsuitable for timber production, especially in the riparian corridor.

**Response:** Approximately 99 percent of the Riparian Corridor prescription area is classified as unsuitable. If any logging occurs in this prescription area it will be for the benefit of riparian and aquatic associated species. Certain steep or inaccessible areas located within the Habitat Diversity prescription area are classified as unsuitable for timber production for economic reasons.

#### 113. Public Concern: The Forest Service should provide details of soil acidification.

**Response:** Recent studies on the Daniel Boone National Forest indicate that acidification is currently not a significant problem at this time. The situation could change in the future, so monitoring will continue.

#### **114.** Public Concern: The Forest Service should modify vegetation standards regarding soils, as recommended.

**Response:** The Revised Forest Plan, Chapters 2 and 3, along with the Forest Service Manual and Handbooks, provide for the adequate protection of soils. Additional protections will be recommended (if needed) at the project level based upon the characteristics of sites that will be affected by projects. Actions taken will provide for the long-term sustainability of the resources of the Daniel Boone National Forest. Some loss of soil productivity may occur in the effort to insure this sustainability.

#### **CLIFFLINES**

**115.** Public Concern: The Forest Service should implement the Cliffline Community Prescription Area because it will benefit several federally listed species.

**Response:** The Cliffline Community Prescription Area is part of the Revised Forest Plan.

116. Public Concern: The Forest Service should adopt a definition of cliffline community that includes habitat quality, uniqueness, and site-specific variables. The Forest Service should conduct analysis and disclose information regarding the designation of cliffline buffers. The Forest Service should develop prescriptions for cliffline communities individually.

**Response:** The Cliffline Community Prescription Area is established in the Revised Forest Plan as a minimum distance requirement. Forestwide observational analysis indicates that the current distances, from a programmatic standpoint, are adequate. Site-specific analysis on an individual project level will determine whether any additional mitigation is necessary to protect proposed, threatened, endangered, and sensitive species, as well as maintain microclimate or other species associated needs. This flexibility is built into the Revised Forest Plan.

117. Public Concern: The Forest Service should prioritize cliffline sections for protection, particularly those supporting proposed, endangered, threatened, and sensitive species, and sites located in proposed natural areas.

**Response:** From a programmatic Forestwide standpoint, all clifflines are biologically important. In site-specific cases, additional areas can be delineated for individual site occurrences of proposed, endangered, threatened, and sensitive species. Programmatically, the Significant Bat Cave Prescription Area provides additional acres of protection for these known locations.

118. Public Concern: The Forest Service should specify how rock shelters will be protected.

**Response:** Rockshelters occur within the Cliffline Community Prescription Area and are subject to both the Forestwide and prescription area standards. Included in these standards is protection from trampling associated with human use. Some rockshelters serve as significant hibernation sites for proposed, endangered, threatened, and sensitive bats and are included within the Significant Bat Cave Prescription Area.

119. Public Concern: The Forest Service should modify the Cliffline prescription zone to extend 100 and 200 feet from the outer edge of cliffline-associated vegetation rather than from the dripline. Unless the effectiveness of the 100-200 foot buffer can be demonstrated, it would seem prudent to err on the conservative side."

**Response:** The distances that are used in the Cliffline Community prescription area have been applied in managing the Daniel Boone National Forest for over ten years. Based on field observations of existing cliffline conditions, we believe the current zone offers adequate cliffline microclimate protection.

**120.** Public Concern: The Forest Service should modify DB-WLF-14 to specify cave buffers that encompass the whole watershed for each cave.

**Response:** Site-specific analysis of individual projects is utilized to determine the potential for disturbance and the need for any addition mitigation measures.

121. Public Concern: The Forest Service should not establish cliffline slope distances because studies have shown that management activities such as timber harvest and road building, when conducted at appropriate times of the year, have no ill effects on bats.

**Response:** The maintenance of microclimate conditions along clifflines is important to many species in addition to bats. This was addressed in the analysis for Amendment 11 to the 1985 Plan, and we are not aware of information that would cause us to draw different conclusions.

**122.** Public Concern: The Forest Service should specify habitat goals for cliffline communities and demonstrate how their designation as "unsuitable for timber harvest" would benefit species and habitat of interest.

**Response:** Habitat goals for this prescription area are included under the Goals section. In addition, the Desired Future Condition narrative addresses the broad category of habitat goals. Vegetation management is allowed only when the purpose and need is to protect or enhance conditions for proposed, endangered, threatened, and sensitive species.

**123.** Public Concern: The Forest Service should not implement the cliffline prescription because of restrictions to cable logging.

**Response:** On a site-specific basis, cable corridors can pass through this prescription area. Standard 1C-Veg-2 has been reworded for clarification.

**124.** Public Concern: The Forest Service should specify that equipment may be used in cliffline communities.

**Response:** The maintenance of hydrologic functions in areas adjacent to clifflines is vital to maintaining stable microclimate conditions. The use of heavy equipment in these areas would adversely impact this condition. Some equipment, such as end lines, is allowed to facilitate habitat maintenance.

125. Public Concern: The Forest Service should modify wording for 1.C. Cliffline Community.

**Response:** The current wording of Standard 1.C-WLF-1 adequately allows for vegetation manipulation designed to meet the desired future condition of the area and provide habitat for proposed, endangered, threatened, and sensitive species.

**126.** Public Concern: The Forest Service should initiate inventories and research of cliffline communities to enhance knowledge of species found there, and determine the types of canopy disturbances that have occurred in the past.

**Response:** The adequacy of the Cliffline Community prescription area is one of the identified research needs identified in Appendix E of the Revised Forest Plan. Natural disturbance regimes will continue to occur along clifflines within the forest. Windstorms, ice, snow, and wildland fire will continue to provide a natural mosaic on the landscape; including clifflines.

**127.** Public Concern: The Forest Service should set more restrictive goals, objectives, and standards, as recommended, for cliffline communities.

**Response:** We believe the current standards associated with this prescription area provide the necessary management direction and limitations to protect and maintain the species associated with this area and their habitats. All project activity within the Cliffline Community prescription area will be based upon site-specific analysis.

#### **CAVES AND KARST**

**128.** Public Concern: The Forest Service should protect cave and karst areas. The Forest Service should designate non-bat caves, non-significant bat caves, and other karst features as rare communities.

**Response:** Programmatic protections included within the Revised Forest Plan apply forestwide. Site-specific analysis is required for individual projects to determine the possible effects to a wide variety of forest resources, including caves. Thus, additional protective measures, as appropriate, are assigned on a project-by-project basis.

**129.** Public Concern: The Forest Service should implement Goal 1.6 and its associated objectives.

**Response:** We fully agree.

**130.** Public Concern: The Forest Service should modify language of Goal 1.6 and Objective 1.6.A to specify stronger protection of cave resources and water quality.

**Response:** The Revised Forest Plan water quality standards apply to all streams, whether or not they are sinking streams. Individual site-specific analysis will determine the degree or amount of additional protection needed, if any, on a project-by-project basis.

**131.** Public Concern: The Forest Service should implement and complete the significant cave nomination and management process by 2005, and complete a cave and karst management plan by 2006.

**Response:** We agree that this is an important issue to be addressed by the Daniel Boone National Forest. That is why it is included as a specific objective to accomplish during this planning period. Exactly when it will be accomplished, within the planning period, is a function of budget, personnel and other factors not within the scope of a forest plan.

**132.** Public Concern: The Forest Service should provide analysis and details regarding special designations of cave and karst areas. The Forest Service should establish buffer zones greater than 200 feet around cave and karst areas.

**Response:** The 200-foot buffer is a Forestwide, programmatic minimum area of cave/karst protection. Site-specific analysis will determine if more restrictive protections are needed based on the individual project location and its projected effects on the environment. For the Significant Bat Cave Prescription Area this protective zone is increased programmatically to ½ mile. Additional standards maintain seasonal activity limitations associated with these caves.

133. Public Concern: The Forest Service should establish a cave prescription area.

**Response:** A Forestwide standard does provide programmatic protection for all caves. Most of the caves on the Daniel Boone National Forest are located within the Cliffline Community Prescription Area or the Significant Bat Cave Prescription Area. Site-specific analysis based on individual projects can tailor additional protective measures as necessary.

**134.** Public Concern: The Forest Service should establish standards, as recommended, that prohibit activities that threaten caves and cave resources.

**Response:** Caves and their associated biological and physical resources are protected based on second level, site-specific analysis, associated with individual projects. Additional protective measures, beyond those prescribed in the Revised Forest Plan, are applied on this site-specific basis as needed to insure adequate protection.

#### **AIR QUALITY**

135. Public Concern: The Forest Service should use current air quality data.

**Response:** The description of ambient air quality in the FEIS has been updated to include monitoring years 2000-2002, the most recent data available. The 1999 emissions inventory used in the effects analyses is the most current available.

136. Public Concern: The Forest Service should not address air pollution abatement.

**Response:** It is true that the Forest does not directly regulate anthropogenic air pollution. The state air regulatory agency has the responsibility for controlling air pollution sources. However the Daniel Boone National Forest is involved in large interagency, regional planning efforts to improve air quality (Southern Appalachian Mountains Initiative, regional haze planning organizations). Ultimately these planning efforts will affect air quality policy and air regulations.

137. Public Concern: The Forest Service should explain why statements of intent to improve soil quality and air quality are contained within one goal, explain why the amount of planned burning is inconsistent with improving air quality, and specify what actions that the Forest Service will implement to improve air quality.

**Response:** These two factors of the environment were combined within one goal because neither was identified in the list of significant issues. The four air quality objectives that are included under Goals 4.1 and 4.2 give direction for action this planning period. Goal 4.2 and standard DB-Fire-3 specifically address air quality and prescribed burning. Although air quality was not identified as a significant issue on the Daniel Boone National Forest, the included direction was considered important to achieve during this planning period.

#### **ILLEGAL DUMPS**

#### 138. Public Concern: The Forest Service should clean up trash sites and dumps.

**Response:** Illegal trash sites and dumps are a blight on the landscape of the Daniel Boone National Forest. We will continue to work hard at insuring that we keep litter and dumping off of the National Forest. We have been working with the "PRIDE" program in physically cleaning up dumps, enforcing dumping laws, and educating our young people about this issue.

#### WATER QUALITY

#### 139. Public Concern: The Forest Service should protect water quality.

**Response:** The management direction throughout the Revised Forest Plan and especially the direction in the Source Water Protection and Riparian Corridor prescription areas is designed to protect water quality. The disclosure of environmental consequences in Chapter 3 of the EIS demonstrates that water quality will be protected.

140. Public Concern: The Forest Service should specify how drinking water will be maintained.

**Response:** The goals, objectives, and standards in the Source Water Protection prescription area are specifically designed to protect drinking water supplies.

141. Public Concern: The Forest Service should work with other private, state, and federal entities and agencies to protect water quality.

**Response:** The Daniel Boone National Forest works closely with numerous other private, state and federal agencies in an effort to protect water quality. The Daniel Boone National Forest is an active member of the Kentucky Watershed Management Framework, a coalition of agencies concerned with water quality. We also interact on a regular basis with private organizations and universities on projects that improve water quality.

**142.** Public Concern: The Forest Service should specify, within the appendix, forestry best management practices that will be implemented to protect water quality.

**Response:** The standard suggested by the commenter has been added to the Forestwide standards at DB-VEG-27. This incorporates the state Best Management Practices by reference.

**143.** Public Concern: The Forest Service should have water quality monitored by a Kentucky certified lab following a state approved Quality Assurance Performance Plan, and share results with the Kentucky Department of Environmental Protection (KDEP).

**Response:** Water quality and stream assessment data is currently shared with KDEP and the suggested sentences have been added to the narrative under Question 15 in Chapter 5 of the Revised Forest Plan.

**144.** Public Concern: The Forest Service should act to provide cleaner water in the Cumberland River and remove debris.

**Response:** We agree. Unfortunately, much of the debris and water quality problems that the commenter refers to are outside of our immediate jurisdiction. To attain the overall goal of cleaner water in the Cumberland River we work closely with other agencies that do have jurisdiction over this problem.

145. Public Concern: The Forest Service should inventory all toxic water sources.

**Response:** Currently toxic water sources are inventoried in cooperation with other state and federal agencies. This will continue on a project-level basis.

**146.** Public Concern: The Forest Service should modify Forestwide standard DB-WLF-15 to exclude filling toxic water source pits and basins.

**Response:** This standard (now DB-WLF-14) has been modified to include all wildlife, and to only allow filling "in an environmentally appropriate manner."

**147.** Public Concern: The Forest Service should force the creators of brine pits and oil catch basins to pay for remediation.

**Response:** When the responsible parties are known, they are required to remediate these impacts. However, many of these sites are abandoned and standard DB-WLF-14 is intended to address such sites.

#### WATERSHED CONDITION

148. Public Concern: The Forest Service should provide information on sub-watersheds and specify the locations of surface water intakes, significant ground water wells, and other water supply sources located within the Daniel Boone National Forest boundary.

**Response:** The Source Water Protection prescription area in the Revised Forest Plan identifies all the major water supply areas within the proclamation boundary. The EIS and future site-specific analysis have or will consider areas that are downstream and outside the proclamation boundary. The reason water usage was discussed for the broader Watershed Management Areas was because this was the scale for which data was available.

**149.** Public Concern: The Forest Service should designate critical water supply watersheds as Management Prescription 5.C - Source Water Protection, and specify why the areas were selected and what water sources will be protected.

**Response:** The Source Water Protection prescription area is based on the Kentucky Division of Water's listing of Source Water Areas. A change made in the "Setting" of this prescription area reflects this. The Proposed Revised Forest Plan showed only the Source Water Protection Areas that are within the Daniel Boone National Forest proclamation boundary because they are the only ones under our jurisdiction. However, the FEIS and future site-specific analysis consider areas that are downstream and outside the proclamation boundary.

150. Public Concern: The Forest Service should protect watersheds.

**Response:** Federal, state and local laws (e.g. National Forest Management Act, Clean Water Act) require that aquatic resources, streams and surface waters be protected. Forest plans provide for protection of aquatic resources by identifying streams and their beneficial uses, and providing standards that protect those resources during management activities. Such standards are found in the Riparian Corridor and Forestwide standards. Further protection will be provided as needed at the project level. Forestwide standards have been developed to provide overall watershed protection during management activities.

#### **151.** Public Concern: The Forest Service should implement a strong aquatic conservation strategy that focuses on the whole watershed.

**Response:** In addition to Riparian Corridor management direction, Forestwide standards (Revised Forest Plan, Chapter 2) have been developed to provide overall watershed protection during management activities.

### **152.** Public Concern: The Forest Service should specify requirements to conduct a watershed analysis prior to initiating site-specific project planning and stipulate the framework for the analysis.

**Response:** Watershed assessments and analysis are excellent tools for identifying priority watersheds and programming restoration work. Assessments are also useful in land management allocations and in the development of prescriptions. Watershed analyses were completed by the Daniel Boone National Forest to assess watershed condition and vulnerability. More detailed watershed analysis will be completed prior to project implementation as needed. Chapter 5 of the Revised Forest Plan also discusses watershed analysis during the implementation phase.

# 153. Public Concern: The Forest Service should designate areas within the Cumberland River watershed under the Watershed Restoration or Aquatic Habitat prescription. The Forest Service should designate watersheds containing Clean Water Act 303(d) listed water bodies under the Watershed Restoration Area Management Prescription.

**Response:** The Revised Forest Plan is in part designed to protect and restore impaired streams and watersheds. Forestwide Objective 3.0.C. directs the Daniel Boone National Forest to concentrate restoration efforts in watersheds with impaired streams. Forestwide Objective 3.0.D. directs the Daniel Boone National Forest to reduce the number of impaired water bodies. Most of the stream impairments do not come from Forest Service activities. As Table 3-53 in the DEIS shows, there is no change in the WHI from any of our proposed management activities. Note that neither the EIS nor Revised Plan specify a "Watershed Restoration" or "Aquatic Habitat" prescription area, although the Large Reservoir prescription area may address this concern.

### **154.** Public Concern: The Forest Service should revise management activities and prescriptions in watersheds located within the Cumberland River Management Area to minimize sediment inputs.

**Response:** As stated on page 3-40 of the DEIS, under the specific effects for Alternative C-1, "Given the natural variability associated with stream sedimentation, it is unlikely that cumulative changes of this magnitude will be detectable on a 5<sup>th</sup> level watershed scale or change the Watershed Health Index for any of the watersheds" (including those in the Upper Cumberland River Management Area). It should also be noted that many of the stream sedimentation impacts are coming from private land that are outside of Forest Service jurisdiction. Even if the Forest Service did nothing in these watersheds over the next 10 years it would probably not significantly change the sediment load in these streams.

### **155.** Public Concern: The Forest Service should define "modified 5<sup>th</sup> level hydrological unit," and provide evidence regarding comparability of watershed analysis.

**Response:** The watershed coverage that we used for the Revised Forest Plan no longer meets national standards for mapping hydrologic units (watersheds). However, it was the best available when we started the analysis. To stay consistent with the rest of the state, we made only minor improvements to this coverage before we started. Recently, the hydrologic units have been brought into compliance with national standards. These new watersheds will be used in all future project planning. As for the results of this analysis, there is a wide range in the size of the watersheds but where appropriate the results were weighted to compensate for the size differences. Therefore, we believe the analysis is comparable.

### **156.** Public Concern: The Forest Service should specify the amount of acres of National Forest System land contained within each 5<sup>th</sup> level hydrological unit.

**Response:** The size of these areas has been specified in the FEIS.

**157.** Public Concern: The Forest Service should identify the miles of streams that do not support designated forest uses within each 5<sup>th</sup> level hydrological unit and provide maps.

**Response:** A new table listing impaired stream miles by watershed has been added. A more up-to-date map can be found at the Kentucky Division of Water's website (www.water.ky.gov). These dynamic maps are the best source for this information, although they are continuously changing.

**158.** Public Concern: The Forest Service should acknowledge impaired water bodies located within 5<sup>th</sup> level hydrological units originating on National Forest System land, as currently listed by the Kentucky Department for Environmental Protection.

**Response:** A new table with impaired stream miles by watershed has been added to the FEIS. The list of impaired streams and their mileage change relatively frequently. To make the analysis consistent, we froze the data at the beginning of this process. That is why your list of stream names and miles may differ slightly. However, since this information is used only to compare alternatives and not as absolute numbers, it should not make a significant difference.

159. Public Concern: The Forest Service should re-examine management prescriptions affecting Clean Water Act 303(d) listed water bodies to determine incompatibilities with objectives for water quality and resource protection.

**Response:** This will be done during project-level analysis. Additional standards can always be added as the need arises. Changes can also be made in conjunction with the state's TMDL process, of which we are a part.

**160.** Public Concern: The Forest Service should partner with state and local agencies to assist with restoration of Clean Water Act 303(d) listed water bodies.

**Response:** Coordination with the state is currently occurring and an implementing objective was added to the Forestwide direction as Objective 3.0.D.

**161.** Public Concern: The Forest Service should implement actions to address aquatic conservation needs of the region, as recommended.

**Response:** The Riparian Corridor prescription area is designed to protect the aquatic ecosystem. This area, combined with the designation of aquatic macroinvertebrate assemblages as important monitoring indices, is expected to provide adequate protection for these important communities. All activities will be evaluated at the project level to ensure compliance with the National Environmental Policy Act and the Endangered Species Act.

**162.** Public Concern: The Forest Service should establish watershed and riparian corridor standards that specify provisions to guide timber harvest as well as the construction, use, and maintenance of roads.

**Response:** Specific road and timber harvest standards are specified in the Riparian Corridor prescription, Forestwide standards, and referenced state Best Management Practices requirements. Such standards and requirements are also stipulated in contract clauses for road construction and timber harvest. The need for additional road stabilization techniques and other use restrictions will be determined at the project level.

### **163.** Public Concern: The Forest Service should modify watershed management Goal 3 and objectives, as recommended.

**Response:** Changes have been made to these goals and objectives for clarification.

#### **164.** Public Concern: The Forest Service should add a new watershed management Goal 4 and objectives, as recommended.

**Response:** Most of the suggested changes are the responsibility of state agencies. However, we do coordinate with adjacent landowners and other agencies through the Kentucky Watershed Management Framework. Objective 3.0.E. has been added under Goal 3 relating to coordination with state and local agencies on Total Maximum Daily Loads (TMDLs) and watershed assessments.

#### **165.** Public Concern: The Forest Service should specify the number of watersheds for restoration and the timetable for restoration.

**Response:** Our objective is to restore all impaired watersheds on the Daniel Boone National Forest during the planning period. However, this objective is worded loosely because it is unlikely that this can be completed due to constrained budgets and in some cases the lack of technology. We will try to expand our capabilities through partnerships and grants.

#### **166.** Public Concern: The Forest Service should consider watershed values within the Lick Creek area.

**Response:** This is outside the scope of the Revised Forest Plan and will be done at the project or watershed scale.

### **167.** Public Concern: The Forest Service should provide explanation and justification for gauging watershed impacts at an arbitrary cut-off of 18 percent (DEIS 3-19).

**Response:** This section of the EIS has been rewritten, and reference to an 18 percent classification break has been dropped.

#### **RIPARIAN AREAS AND WETLANDS**

#### **168.** Public Concern: The Forest Service should emphasize the benefits of sound riparian areas.

**Response:** The Setting and Desired Future Condition sections of the Riparian Corridor prescription area address the aquatic portion of this area.

### **169.** Public Concern: The Forest Service should not implement the preferred alternative because it allows the stocking of non-native fish.

**Response:** The management of fish and wildlife resources is the responsibility of the state government. The Daniel Boone National Forest works cooperatively with state agencies but the decision of what and where to stock is theirs.

### **170.** Public Concern: The Forest Service should provide greater protection for riparian areas and perennial streams.

**Response:** Protection is provided in the Revised Forest Plan for streams, lakes, aquatic resources, wetlands, and floodplains (see Riparian Corridor Prescription). Specific standards are prescribed in the Riparian Corridor Prescription and Forestwide standards.

171. Public Concern: The Forest Service should specify that riparian corridors are managed to retain, restore, and enhance inherent ecological processes.

**Response:** The goals in the Riparian Corridor prescription area are aimed at restoring and enhancing the inherent ecological processes and function of the associated aquatic, riparian, and upland components. The Revised Forest Plan addresses improving impaired streams under Forestwide Goal 3.

172. Public Concern: The Forest Service should implement Riparian Corridor Prescription 1.E.

**Response:** This prescription area is in the Revised Forest Plan.

**173.** Public Concern: The Forest Service should clarify Riparian Corridor Prescription 1.E. to specify that widths in Table 3 - 1 of the Proposed Plan Revision are required minimums.

**Response:** The Setting section of the Riparian Corridor prescription area has been so modified.

174. Public Concern: The Forest Service should analyze and disclose information regarding the establishment of riparian corridor widths.

**Response:** Standard DB-VEG-27 has been added to the Forestwide section to require that activities "must implement applicable Kentucky Rules and Regulations for Water Quality Control and Kentucky's Best Management Practices (BMPs) for Forestry." Wording similar to this has also added to the Setting section of the Riparian Corridor prescription area.

175. Public Concern: The Forest Service should clarify the definition of "riparian corridor" to provide specificity regarding stream presence.

**Response:** The "riparian corridor" definition in the glossary has been modified. The "riparian area" definition also has been modified. The combination of these two definitions is important in understanding the Riparian Corridor prescription area.

176. Public Concern: The Forest Service should better define "other perennial water bodies."

**Response:** This definition has been clarified in the Revised Forest Plan and FEIS.

177. Public Concern: The Forest Service should define zones around channeled ephemeral streams and specify how zones are protected; should specify Forestwide standards to protect ephemeral streams as recommended; or include ephemeral streams in the riparian corridor prescription.

**Response:** Scoured ephemeral streams have now been provided protection in several ways, such as Forestwide Goal 3.2, and standards DB-ENG-4 and DB-REC-7; they are no longer included in the Riparian Corridor prescription area (see Revised Forest Plan). Ephemeral streams do not have riparian characteristics and, therefore, are managed and protected with streamside management zones (see Goal 3.2). Because of their characteristics (i.e. periodic response to stream flow and uncertain identification criteria) specific guidance for management of ephemeral streams is more appropriate at the Forestwide level.

**178.** Public Concern: The Forest Service should not implement management restrictions for ephemeral streams.

**Response:** Our assessment of aquatic resources has shown that these areas are important to the overall health of stream ecosystems.

### 179. Public Concern: The Forest Service should expand riparian corridor widths for intermittent streams to protect these important resources.

**Response:** Protection is provided in the Revised Forest Plan for all streams, lakes, aquatic resources, wetlands, and floodplains (see Riparian Prescription and Forestwide direction). Riparian Corridor widths were based on an assessment of aquatic resources conducted for the Daniel Boone National Forest in 2001, input from specialists in the Forest Service Southern Region, research findings, monitoring data, current literature recommendations, and Daniel Boone National Forest professional expertise.

#### **180.** Public Concern: The Forest Service should protect the entire channel network, including the headwater streams and transition zones.

Response: Protection is provided in the Revised Forest Plan for all streams, lakes, aquatic resources wetlands and floodplains (see Riparian Prescription and Forestwide direction). Riparian Corridor widths were based on an assessment of aquatic resources conducted for the Daniel Boone National Forest in 2001, input from specialists in the Forest Service Southern Region, research findings, monitoring data, current literature recommendations, and Daniel Boone National Forest professional expertise. Further protection will be considered and prescribed as needed when projects are developed. Ephemeral streams do not have riparian characteristics and therefore are managed and protected with streamside management zones. Because of their characteristics (i.e. periodic response to stream flow and uncertain identification criteria), specific guidance for management of ephemeral streams is appropriately developed at the forest level. Standard for managing ephemeral streams are included in the Forestwide standards.

### **181.** Public Concern: The Forest Service should expand the Riparian Corridor to benefit diversity of the bird community.

**Response:** Provisions for the avian community were considered in developing direction for the Riparian Corridor prescription area. Inclusion of the 100-year floodplain focuses management on riparian attributes for all riparian habitat associated with perennial streams, even where extensive bottomland floodplains occur. The Riparian Corridor's desired future condition for riparian habitat was designed to provide an element of connectivity for the high canopy structure across the Daniel Boone National Forest, improving opportunities for species movement. Management zones designated for scoured ephemeral streams were designed to contribute to the diversity of bird communities on the forest, as well as providing for inherent ecological processes and function of the aquatic, riparian, and upland components.

### **182.** Public Concern: The Forest Service should not establish riparian corridor widths based on slope because of the difficulty of slope measurement in this area.

**Response:** The table in the Setting section of the Riparian Corridor prescription area has been changed to eliminate the need for slope measurement.

#### 183. Public Concern: The Forest Service should establish equal buffer widths for all water bodies.

**Response:** The 300-foot buffer is for recreation and visual reasons (e.g. proximity to lakes) rather than soil and water concerns.

### **184.** Public Concern: The Forest Service should conduct analysis and disclose information regarding the establishment of buffer widths, as requested.

**Response:** Riparian Corridor widths were based on an assessment of aquatic resources conducted for the Daniel Boone National Forest in 2001, input from specialists in the Forest Service Southern Region, research findings, monitoring data, current literature recommendations, and Daniel Boone National Forest professional expertise. The table in the setting of the Riparian Corridor prescription area has been changed and the minimum distances are no longer based on slope. The 300-foot buffer in the Large Reservoir prescription area is for recreation and visual reasons (e.g. proximity to lakes) rather than soil and water concerns. Standards for managing ephemeral streams are included in the forestwide standards.

### **185.** Public Concern: The Forest Service should specify that at least 50 percent of canopy cover will be maintained within riparian corridors.

**Response:** Only a small percentage of the Riparian Corridor prescription area will be harvested and it will be done to benefit riparian and aquatic associate species. If it appears that there will be a problem with stream temperatures, additional standards can be applied on a site-specific basis.

### **186.** Public Concern: The Forest Service should provide a scientific rationale for managing canopies in riparian and wetland areas.

**Response:** Canopy management as outlined in the Revised Forest Plan allows for the maintenance of riparian/aquatic habitat components often created by storm events, but lessened by past management. Storm events may provide some of these habitat components and will be taken into account in site specific planning.

### **187.** Public Concern: The Forest Service should retain all trees within one site potential tree height of a stream to provide coarse woody debris for the stream.

**Response:** The Riparian Corridor prescription area was designed to retain future large woody debris. The only trees that will be removed within one tree length of perennial streams will be removed to accommodate other riparian or aquatic values.

### **188.** Public Concern: The Forest Service should specify requirements for the amount of course woody debris and large woody debris that must be present within riparian corridors.

**Response:** Recommendations for course woody debris are available within our internal Guidelines document. The amount is currently set at 125 pieces per stream mile. The science was deemed not strong enough to indicate the need for a standard.

### **189.** Public Concern: The Forest Service should not implement restrictions that prohibit the maintenance of wildlife openings and wildlife viewing areas around large reservoirs.

**Response:** The management zone around large reservoirs was designed as a visual management zone, which may also coincide with the Source Water Protection prescription area. The objectives within these prescription areas will normally take precedence over development of habitat such as grassy openings. Maintenance of existing grassy openings will generally continue to occur for wildlife and wildlife viewing purposes unless negative effects are occurring. Site-specifically, other habitat management may be necessary. Where prescription areas overlap, the most restrictive standards will apply (e.g. 3.B-VEG-1).

#### **190.** Public Concern: The Forest Service should establish standards for large reservoirs, as recommended.

**Response:** Federal, state and local laws (e.g., National Forest Management Act and Clean Water Act) require that aquatic resources, streams and surface waters be protected. Standards in the Revised Forest Plan must apply equally to all conditions throughout the Forest. The standards suggested would unnecessarily restrict activities needed to meet desired future conditions. Further protection will be provided as needed at the project level. Forestwide standards have been developed to provide overall watershed protection during management activities.

#### **191.** Public Concern: The Forest Service should not allow any new impoundments on the Daniel Boone National Forest.

**Response:** We disagree. Impoundments may sometimes be necessary to meet desired future conditions, depending upon specific-site conditions.

#### **192.** Public Concern: The Forest Service should create new wetlands and maintain existing wetlands.

**Response:** Please refer to Forestwide Goal 1.2 which states, "Create and maintain water sources with a mixture of temporary/seasonal and permanent shallow water pools throughout the Forest."

### **193.** Public Concern: The Forest Service should modify Forestwide standard DB-Veg-3 such that wetland restoration and waterhole projects would not be restricted.

**Response:** DB-VEG-3 has been reworded to include only "logging or site preparation equipment" rather than all "mechanical equipment."

### **194.** Public Concern: The Forest Service should restore land in the Salt Lick and Mud Lick drainages to wetlands and native prairie conditions.

**Response:** The Morehead District land ownership adjustment map (available at the Winchester and Morehead offices) identifies the Salt Lick area for future acquisition.

### 195. Public Concern: The Forest Service should identify and survey all bogs, wetlands, and riparian habitat, and detail how they are protected.

**Response:** Riparian areas have been mapped for the whole Daniel Boone National Forest and this mapping will be confirmed during project and watershed-level analysis. Riparian associated vegetation will be analyzed during project and watershed-level planning.

#### **196.** Public Concern: The Forest Service should document the cumulative effects of changes in riparian areas on species and resources.

**Response:** The FEIS examines and compares the significant cumulative effects of the proposed alternatives. It does not examine historical activities and their cumulative effects.

### **197.** Public Concern: The Forest Service should provide clarification and specificity regarding distance requirements for disturbance activities from water.

**Response:** This was a typographic error and has been corrected.

#### 198. Public Concern: The Forest Service should establish fringe buffers and secondary riparian zones.

**Response:** We believe that the Riparian Corridor prescription area -- with its standards, goals, and objectives -- provides adequate protection for riparian zones. Additional protections may be determined to be necessary on specific sites when activities are proposed.

## **199.** Public Concern: The Forest Service should make riparian corridors consistent with existing best management practices, and ensure that vegetation management, habitat diversity goals and timber production mesh.

**Response:** Riparian Corridor widths were based on an assessment of aquatic resources conducted for the Daniel Boone National Forest in 2001, input from specialists in the Forest Service Southern Region, research findings, monitoring data, current literature recommendations, and Daniel Boone National Forest professional expertise. Standard DB-VEG-27 was added to the Forestwide section requiring that activities "must implement applicable Kentucky Rules and Regulations for Water Quality Control and Kentucky's Best Management Practices for Forestry (BMPs)." Similar wording was also added to the Setting section of the Riparian Corridor prescription area.

### **200.** Public Concern: The Forest Service should specify that early successional habitat may be created in intermittent or ephemeral streams and perpendicular to streams for woodcock habitat.

**Response:** Direction as written in the Revised Forest Plan allows for this condition or conditions very much like it. We anticipate additional areas of early seral habitat to be created just outside the Riparian Corridor through management action and areas with some early seral habitat components to be created within the Riparian Corridor through storm events.

### **201.** Public Concern: The Forest Service should not classify riparian acreage as unsuitable for timber production and should maintain a range of habitat management activities within riparian areas.

Response: Habitat management activities including timber harvesting activities may occur in riparian corridors when they are needed to maintain, restore or enhance riparian functions and values or to meet the needs of riparian associated species. Under 36 CFR 219.27(c)(1), harvesting activities can occur on lands classified as "not suited for timber production" when such activities are necessary to protect other multipleuse values or are needed to meet forest plan objectives. Riparian corridors were designated as not suitable for timber production because it was determined that managing these lands for the purposes of having "regulated crops of trees...for industrial or commercial use" (36 CFR 219.3) was inconsistent with meeting the desired conditions of the riparian corridor. Riparian associated species includes all native species found in the riparian area.

#### **202.** Public Concern: The Forest Service should explain why riparian/aquatic habitat couldn't be increased (DEIS 3-202).

**Response:** The statement you refer to addresses only the amount of riparian area, not the quality of riparian areas. Forestwide Goal 3 and its objectives address enhancing the individual values and ecological functions of riparian areas.

### **203.** Public Concern: The Forest Service should specify that access development will be allowed within riparian corridors for management of Habitat Diversity or the Ruffed Grouse Emphasis Areas.

**Response:** Roads are conditionally allowed in the Riparian Corridor prescription area. Please refer to 1.E-Objective-5.B of the Draft Revised Forest Plan.

### **204.** Public Concern: The Forest Service should prioritize riparian corridors and provide flexibility in implementing objectives.

**Response:** The priority of specific actions will be determined annually as 10-year cycle site-specific inventories are completed. Actions will occur based upon annual budgets and resources available.

#### **205.** Public Concern: The Forest Service should explain why riparian areas are singled out regarding effects of grassy openings on aquatic habitat in 1.E-WLF-2.

**Response:** This standard is intended to help achieve the desired future condition of the riparian corridor.

### **206.** Public Concern: The Forest Service should prohibit any in-stream disturbance when proposed, endangered, threatened, or sensitive species occur nearby.

**Response:** All activities will be evaluated at the project level and will comply with all National Environmental Policy Act and Endangered Species Act requirements.

#### **207.** Public Concern: The Forest Service should establish strict guidelines for crossing ephemeral streams to harvest timber.

**Response:** Standard DB-ENG-4 in the Revised Forest Plan states, "Restrict motorized vehicle use in the scoured ephemeral stream zone to designated sites."

#### **208.** Public Concern: The Forest Service should allow the use of designated equipment within riparian areas.

**Response:** The following desired future conditions and standards have been added to the Riparian Corridor Prescription Area in an effort to clarify management direction:

- **DFC addition** Vegetation management, including a limited amount of logging, may occur when the purpose is to improve riparian function and values or where cable corridors are needed for adjacent prescription areas.
- 1.E-VEG-1. Cable logging corridors, cable sets, and tail trees may be installed in this Prescription Area only at designated locations. Full suspension will be required if logs are yarded across perennial or intermittent streams.
- 1.E-VEG-4. Skid roads and skid trails used for management of adjacent Prescription Areas must not encroach upon the riparian corridor.

### **209.** Public Concern: The Forest Service should prohibit roads, trails, timber harvest, salvage operations and all similar activities within riparian corridors.

**Response:** Protection is provided in the Revised Forest Plan for streams, lakes, aquatic resources, wetlands, and floodplains (see Riparian Prescription and Forestwide direction). Riparian Corridor widths were based on an assessment of aquatic resources conducted for the Daniel Boone National Forest in 2001, input from specialists in the Forest Service Southern Region, research findings, monitoring data, current literature recommendations, and Daniel Boone National Forest professional expertise. Further protection will be considered and prescribed as needed when projects are developed.

#### **210.** Public Concern: The Forest Service should modify 1.E. goals, objectives, and standards for riparian areas and corridors, as recommended.

**Response:** All the suggested changes were considered and many of the specific changes suggested were made in the Revised Forest Plan.

#### **Biological Elements**

**211.** Public Concern: The Forest Service should maintain the viability of native species, protect federally listed species, and enhance habitats.

**Response:** We believe the Revised Forest Plan will do this. Refer to the analysis of species viability in Chapter 3 of the FEIS.

**212.** Public Concern: The Forest Service should provide standards for additional species beyond Indiana bats.

**Response:** Standards specific to Indiana bat were developed because of its likely ubiquitous presence on the Daniel Boone National Forest, and its nature of use of the forest. Other species across the spectrum are addressed through specific standards (e.g., peregrine aeries, 1.C.WLF-3; PETS, 1.C.WLF-1; cliff species, 1.C.REC-3), habitat objectives (e.g., cerulean warbler, Objective 1.1.B.; various habitat conditions, 1.K.Objective 1.A - 1.M) and the establishment of prescription areas circumscribing particular types of habitats (e.g., Cliffline Prescription Area, Rare Communities Prescription Area, Significant Bat Cave Prescription Area). These prescription areas were developed, in part, based on information in the Viability Assessment completed in 2003. The needs of other species are covered through these measures. As needed, monitoring is available as a tool.

213. Public Concern: The Forest Service should conduct detailed biological inventories.

**Response:** Inventories are conducted as stand-alone projects and as part of other projects.

**214.** Public Concern: The Forest Service should specify details for aquatic species, rare species, and allowing woody material to enter the aquatic environment for habitat.

**Response:** We believe prescription area and Forestwide management direction provides for these species, and in fact was developed with the full range of species in mind.

**215.** Public Concern: The Forest Service should explain differences in requirements for scientific specimen removal permits across prescriptions.

**Response:** Changes have been made to prescription area descriptions to add consistency where needed.

**216.** Public Concern: The Forest Service should establish strong, binding standards and monitoring requirements.

**Response:** We believe the management direction developed for the Revised Forest Plan provides for appropriate management, including protection of species, their habitats, and other forest resources.

#### **BIODIVERSITY**

217. Public Concern: The Forest Service should keep the focus on biodiversity within the forest.

**Response:** Biodiversity considerations were reflected in several of the 14 significant issues that guided development of the alternatives considered. The Revised Forest Plan provides management direction that will enhance the biodiversity on the Daniel Boone National Forest.

218. Public Concern: The Forest Service should take a hard look at the biological diversity of the Daniel Boone National Forest. The Forest Service should clearly define "management for biodiversity," and address conflicts between biodiversity and timber management goals. The Forest Service should strive to achieve native biodiversity without commercial timber harvest.

**Response:** We have compiled a list of around 4,000 species that are known to occur or are reasonably expected to occur on the National Forest. We will continue to develop that list as time goes on. The Revised Forest Plan was developed to provide for the various aspects of biodiversity (see definition for biological diversity in the Revised Forest Plan or FEIS glossary) and uses a variety of tools and techniques, including the cutting and harvest of trees, to achieve biodiversity goals. The Revised Forest Plan shifts the role of timber harvesting from one of primarily an activity to produce timber, to one as a tool for creating the desirable future conditions described in the Plan and yielding timber as a byproduct.

**219.** Public Concern: The Forest Service should protect habitat. The Forest Service should maximize biodiversity and restore the traditional native plant ecology. The Forest Service should specify that genetic variability for forest species will be maintained. The Forest Service should also implement management activities that sustain a high diversity of habitat and species.

**Response:** We believe that the mix of prescriptions and their respective goals, objectives and standards -- along with Forestwide goals, objectives and standards -- will do this.

### PROPOSED, ENDANGERED, THREATENED, SENSITIVE, AND RARE SPECIES

**220.** Public Concern: The Forest Service should include all animals and plant life currently on the Forest on the list of protected and monitored species.

**Response:** The National Forest Management Act requires that species viability be maintained on national forests. What the comment suggests is integral within Goal 1 of the Plan. For more information, see the Viability section in Chapter 3 of the FEIS and Appendix D of the Revised Forest Plan.

**221.** Public Concern: The Forest Service should protect endangered species.

**Response:** Consultation with the U.S. Fish and Wildlife Service is required for all federal actions on the forest, including programmatic actions such as the Revised Forest Plan. The National Forest Management Act (NFMA) requires that species viability be maintained on the national forest. Adherence to these federal laws is mandatory and the Revised Forest Plan provides management direction that supports compliance with NFMA and the Endangered Species Act.

222. Public Concern: The Forest Service should rebuild endangered populations.

**Response:** The desired future conditions of the prescriptions areas describe the conditions that are favorable to increasing the population levels of proposed, endangered, threatened, and sensitive species on the Daniel Boone National Forest. Goals and objectives are designed to move the National Forest toward these habitat conditions. Specifically, the Revised Forest Plan establishes a goal (1.C-Goal 2) to facilitate the delisting of white-haired goldenrod during this planning period. As recovery plans are written and re-written, they will be used in conjunction with desired future condition.

**223.** Public Concern: The Forest Service should demonstrate that it has fully and accurately used the best available science in identifying and ranking species with viability concerns, including extirpated species.

**Response:** While it may appear that we have ignored some listed or extirpated species, we have not. The viability analysis process we used was based in part on the presence of, or a high likelihood of the presence of, a given species within the planning unit (National Forest System land). If the species is extirpated and or the habitat is gone, it was assigned an F Rank of FH, FX or F0 and considered no further. New information may prompt a revision of the analysis for the species.

**224.** Public Concern: The Forest Service should use surveys conducted by the Forest Service, Kentucky State Nature Preserves Commission, and the Nature Conservancy for designating unique prescription areas and rare communities.

**Response:** Information from cooperative efforts was used to develop and consider both old-growth and rare communities. However, it was not the only consideration. Our approach to both differed from that of Kentucky State Nature Preserves Commission and The Nature Conservancy, and the gross level mapping did not allow us in every case to specifically identify rare communities. We expect more sites to be added with additional fieldwork

**225.** Public Concern: The Forest Service should implement a Forest Conservation List to track occurrences and trends, and use assessments of viability to direct management activities uniformly across ranger districts.

**Response:** We have a list in place that appears in part in Appendix H of the FEIS (It does not include species ranked FX, FH or F0). We expect this list to change regularly and frequently and, therefore, do not believe it appropriate to include it as a static list in the Revised Forest Plan.

**226.** Public Concern: The Forest Service should conduct species assessments, establish population levels necessary for viability, and ensure viability. The Forest Service should develop specific objectives and standards for rare and sensitive species, conduct annual monitoring, and evaluate mitigation measures. The Forest Service should analyze the effects of each alternative on the survivability of each species and critical habitat.

**Response:** The process outlined in the Viability section of Chapter 3 and Appendix H of the FEIS addresses the vast number of species present, the lack of appropriate data to do species assessments with population levels, and an appropriate focus on habitat supported by regulation. In addition, Chapter 5 of the Revised Forest Plan includes monitoring of habitat and population elements to gauge the effects of Forest Plan implementation on species and ecosystems.

**227.** Public Concern: The Forest Service should implement directives and plans for species' reintroduction and recovery and specify management measures.

**Response:** Specific management measures used in the reintroduction and recovery of species populations are an evolving science and depend, in part, upon project-specific analysis. The Revised Forest Plan addresses the need for species recovery in Goal 1.1. More specific direction or plans will be addressed during project planning.

**228.** Public Concern: The Forest Service should comply with direction requiring management and recovery of threatened, endangered, and sensitive species.

**Response:** We agree. The Revised Forest Plan does not supercede any federal law or manual direction.

### **229.** Public Concern: The Forest Service should conduct analysis to determine if federally listed species inhabit old mines and whether activities around the mines could affect the species.

**Response:** This is a site-specific project rather than something to be specifically delineated in a forest plan. The Daniel Boone National Forest is currently evaluating several old mine openings to determine their use by proposed, endangered, threatened, and sensitive bats.

### **230.** Public Concern: The Forest Service should evaluate habitats to determine their capability to support re-introduction of proposed, endangered, threatened, and sensitive species.

**Response:** Goal 1.1 states: "Evaluate habitats to determine those capable of supporting re-introduction of proposed, endangered, threatened, and sensitive species." As opportunities arise, specific habitat and species evaluations can occur to address this Forestwide goal.

#### 231. Public Concern: The Forest Service should manage marginal habitats and populations.

**Response:** Marginal or unsubstantiated habitats for many species, including bats, are provided for in several of the designated prescription areas. For example, hundreds if not thousands of caves exist within the Cliffline Community prescription area and are subject to programmatic habitat protections associated with that area. If inventory or monitoring data indicates these individual sites are in need of additional protective measures, they can be applied on an individual, site-specific basis.

### **232.** Public Concern: The Forest Service should require collectors to report data for monitoring purposes.

**Response:** This is a specification for commercial and scientific permits. Personal use permits are not subject to this specification.

#### 233. Public Concern: The Forest Service should define and provide full details on 'keystone' species.

**Response:** Keystone species is defined in the FEIS. We considered keystone species in our analysis. Those which do not fit "declining species of high public interest" or listed species or species with limited populations (see FEIS), are not considered further as explained in the FEIS.

### **234.** Public Concern: The Forest Service should provide details regarding the use of enforcement to prevent negative effects of activities to endangered species.

**Response:** The Revised Forest Plan creates prescription areas, including Significant Bat Cave, Riparian Corridor, and Cliffline Community, with management direction and specific standards designed to provide programmatic protection for species associated with these areas. Other Forestwide standards, objectives, and desired future conditions are designed to maintain species viability across the National Forest. Law enforcement actions are not part of the decisions made in a forest plan.

### **235.** Public Concern: The Forest Service should analyze the effects of management for game species on the viability of proposed, endangered, threatened, and sensitive species.

**Response:** The Kentucky Department of Fish and Wildlife Resources (KDFWR) manages populations of game species throughout the state, including the Daniel Boone National Forest. The Forest Service manages habitat for games species on National Forest System land. Except for ruffed grouse, proposed management on the Daniel Boone National Forest does not specifically target any games species, although we acknowledge that several are likely to benefit from such management. Analysis conducted in the Daniel Boone National Forest Management Indicator Species Report of 2001 suggests that white-tailed deer populations are increasing without regard to habitat management on the Forest. As needed, we have the opportunity to exclude deer and or other species from certain habitats and work with KDFWR to modify population levels.

### **236.** Public Concern: The Forest Service should specify more research needs for proposed, endangered, threatened, and sensitive species.

**Response:** Research is recognized as an important component of species and habitat management on a national basis, especially for federally listed species. While research on the Daniel Boone National Forest is encouraged, specific research projects are not part of the actions approved by a forest plan.

## **237.** Public Concern: The Forest Service should list native communities in Goal 1.1 that will be restored to support proposed, endangered, threatened, and sensitive species, and provide consistent coverage.

**Response:** This information is provided in the Proposed, Endangered, Threatened and Sensitive Species section in Chapter 3 of the FEIS.

### **238.** Public Concern: The Forest Service should specify how buffer zones around natural areas and significant watersheds will be managed to protect imperiled species.

**Response:** Site-specific analysis occurs for projects to implement the Revised Forest Plan. Protection will be applied as analysis shows it is needed.

### **239.** Public Concern: The Forest Service should ensure accuracy regarding rare birds and habitat management.

**Response:** For Kentucky, and most of its range, the comment is correct. The error has been corrected in the Revised Forest Plan and FEIS. What is important is that the correct habitat association is in place where it might have affected analysis.

#### **MANAGEMENT INDICATOR SPECIES (MIS)**

240. Public Concern: The Forest Service should expand species designated as management indicator species. Reptiles, amphibians, mussels, fish, cave species, aquatic macro-invertebrates, and rare species should be monitored. The Forest Service should explain why cowbirds are excluded from the management indicator species list. Other flora should be used as management indicator species instead of pitch pine. White-tailed deer should not be used as a management indicator specie. The Forest Service should specify management and monitoring requirements and work with partners to implement programs. The Forest Service should use teams of conservation biologists when selecting species for monitoring and management. Management and species responses should be documented. The Forest Service should conduct full surveys and inventories of species and their habitats sufficient to ensure species viability. The Forest Service should use a robust management indicator species program and not rely on plan-level analysis of community habitat types.

**Response:** These concerns have been addressed in a new section within the FEIS (Appendix B, MIS), and in the Revised Forest Plan (Appendix D, Monitoring).

**241.** Public Concern: The Forest Service should provide the same regulatory importance to the Macroinvertebrate Index of Biological Integrity (MIBI) as Management Indicator Species.

**Response:** The MIBI, selected to represent aquatic communities, do not meet the definition given to MIS in the implementing regulations for the National Forest Management Act, but we have identified them as an equally important monitoring element (Revised Forest Plan, Chapter 5).

**242.** Public Concern: The Forest Service should specify 2-3 species with intolerance for silt/sediment as management indicator species.

**Response:** Several fish species will be regularly monitored (especially the proposed, endangered, threatened, and sensitive species) at the project level. This will be done in addition to monitoring of indices based on macroinvertebrate assemblages.

**243.** Public Concern: The Forest Service should acknowledge and include the 1996 Citizens' Alternative list of management indicator species.

**Response:** We were able to find a list of 3 species, all birds, two of which were included in our MIS list. The third we considered but did not believe it met the conditions for an effective MIS species on the Daniel Boone National Forest.

**244.** Public Concern: The Forest Service should establish a range of management indicator species that vary by alternative and management activity.

**Response:** Please see the MIS section in Appendix B of the FEIS. Varying MIS by alternative prevents comparison of effects by alternative.

245. Public Concern: The Forest Service should include aquatic species as management indicator species, conduct monitoring at least every five years, and conduct monitoring every 2-3 years if federally listed aquatic species are present, or when potential projects are planned.

**Response:** Aquatic macroinvertebrate assemblage indices will be monitored (Chapter 5, Revised Forest Plan) to evaluate the effects of management on aquatic communities. More frequent monitoring (more than every ten years) will be accomplished at the project level, but will be done on an irregular schedule.

#### **246.** Public Concern: The Forest Service should explain how aquatic management indicator species are unrelated to riparian disturbances.

**Response:** The Watershed Health Index is a relatively large-scale coarse filter developed to evaluate alternatives in forest plans and to establish priority work at the planning scale. Therefore, further detailed analyses of the watershed will be conducted at the project level.

**247.** Public Concern: The Forest Service should specifically list and address proposed, endangered, threatened, and sensitive species as an objective in Goal 1.1.

**Response:** The current list of proposed, endangered, threatened, and sensitive species is provided within the supporting DEIS and the Biological Assessment prepared for the Revised Forest Plan. The Biological Assessment is part of the process records and is available for inspection upon request.

**248.** Public Concern: The Forest Service should remove dates from J.E-WLF-1 for proposed, endangered, threatened and sensitive species.

**Response:** These dates are designed to provide programmatic direction during the period believed to be most sensitive to aquatic species, particularly mussel populations. Site-specific project analysis will determine whether further limitations on management actions are warranted.

**249.** Public Concern: The Forest Service should analyze the effects of each alternative on the viability of management indicator species.

**Response:** We provided analysis for the effects of each alternative on MIS. Please see the MIS discussion under the Vegetation Cover section in Chapter 3 of the FEIS.

#### LOCALLY RARE SPECIES

250. Public Concern: The Forest Service should protect locally rare species and ensure viability.

**Response:** The National Forest Management Act requires that species viability be maintained on national forests. What the comment suggests is integral within Goal 1 of the Plan. For more information, see the FEIS (Chapter 3 Viability and Appendix H).

251. Public Concern: The Forest Service should protect and restore rare species habitat.

**Response:** We believe the Revised Forest Plan as designed gives this direction.

**252.** Public Concern: The Forest Service should address sensitive and locally rare species issues through habitat development and protection.

**Response:** The Revised Forest Plan has been developed to provide objectives for the enhancement of rare species habitat and standards to limit actions that could cause undesirable effects to this habitat.

**253.** Public Concern: The Forest Service should ensure that lists of sensitive and locally rare species are developed in an objective manner based on science, and not use lists to elevate concern above what is reasonable and pertinent.

**Response:** Both lists were objectively developed using the best available science. The sensitive list is derived from the Regional Forester's Sensitive list (see FEIS, Chapter 3, Proposed and Endangered, Threatened, and Sensitive Species), whereas the locally rare list was developed through a regional partnership with NatureServe (see discussion in the Viability section of Chapter 3 and Appendix H of the FEIS).

#### SPECIFIC SPECIES

**254.** Public Concern: The Forest Service should protect bat caves.

**Response:** We agree and this is an important provision of the Revised Forest Plan. Refer to the Significant Bat Cave prescription area in the Revised Forest Plan.

**255.** Public Concern: The Forest Service should implement the Significant Bat Caves Prescription Area.

**Response:** This prescription area is in the Revised Forest Plan.

256. Public Concern: The Forest Service should expand bat maternity habitat.

**Response:** A Forestwide standard currently protects habitat within  $2\frac{1}{2}$  miles of maternity sites during the summer months. If site-specific analysis determines that a larger area is needed to include adequate water needs, additional distances from the maternity site can be applied. The development of water sources is concentrated in the vicinity of where the bats are known to occur.

**257.** Public Concern: The Forest Service should implement Prescription Area 1.J, but with larger buffer areas deemed unsuitable for timber production.

**Response:** The actual prescription area covers an area of ½ mile radius from significant bat caves. However, additional standards limit management activity, including timber harvest, both seasonally and within the area of the bat cave to provide habitat protection.

**258.** Public Concern: The Forest Service should revise and expand the definition of "significant bat cave."

**Response:** We agree that all caves are special habitats. All caves on the Daniel Boone National Forest receive programmatic protection through Forestwide standards and the Cliffline Community and Significant Bat Caves prescription areas. In addition, any project is subject to site-specific analysis to determine, in part, if additional protective measures are needed for cave resources.

**259.** Public Concern: The Forest Service should conduct research on bat foraging as related to management actions on canopies.

**Response:** Specific research projects are not part of what forest plans decide. We certainly recognize the need for this type of research and encourage its undertaking.

### **260.** Public Concern: The Forest Service should use the latest scientific information to protect bats and consider recent court rulings.

**Response:** We believe that through working with the U.S. Fish and Wildlife Service, we have included in the Revised Forest Plan the best science available in the management of all proposed, endangered, threatened, and sensitive species on the Daniel Boone National Forest.

#### 261. Public Concern: The Forest Service should specify measures to protect the Indiana bat.

**Response:** Numerous protections for the Indiana bat and its habitat are found throughout the Revised Forest Plan, as well as objectives that should aid in its recovery. Both prescription area and Forestwide standards have been designed to protect the Indiana bat and its habitat.

### **262.** Public Concern: The Forest Service should not single out Indiana bats for species-specific objectives.

**Response:** The Daniel Boone National Forest is required by law and policy to protect all proposed, endangered, threatened, and sensitive species occurring on the forest. Much of the Indiana bat management direction was developed from earlier U.S. Fish and Wildlife Service Biological Opinions written specifically for the Indiana bat on the Daniel Boone National Forest.

#### **263.** Public Concern: The Forest Service should revise management activities and viability analysis for mussels to reflect current research.

**Response:** The Watershed Health Index (WHI) and associated analyses were designed to identify large-scale attributes that may contribute to the maintenance of aquatic systems. Changes in land use and disturbance were modeled with respect to estimated increases in sediment and predicted impacts on available aquatic habitat. Surveys and monitoring of mussel populations and distributions are ongoing on the Daniel Boone National Forest.

## **264.** Public Concern: The Forest Service should not use the cerulean warbler as a management indicator species because the specificity makes this a site-specific consideration, not a forest plan consideration.

**Response:** Management Indicator Species are to be considered in site-specific projects. Specific management direction for cerulean warbler was developed because of the large area considerations needed. More local site-specific decisions will determine exactly where to apply management for the desired conditions associated with this species and others with similar requirements.

### **265.** Public Concern: The Forest Service should specify desired future conditions and goals for the red-cockaded woodpecker.

**Response:** Restoration of the pine community upon which the red-cockaded woodpecker (RCW) depends is a long-term goal of the Revised Forest Plan. Because of the devastating southern pine beetle infestation between 1999 and 2001, the Daniel Boone National Forest will continue to have no suitable habitat for the RCW during the next decade. In the future, as Revised Forest Plan directed activities continue, the RCW may once again be part of the biotic community on the National Forest. Whether this potential habitat will be needed to help in the recovery of the species is not a forest plan decision.

### **266.** Public Concern: The Forest Service should not single out the white-haired goldenrod for management focus.

**Response:** This species is known to occur only on the Daniel Boone National Forest and therefore the ability to recover this species depends entirely on our management. Therefore, it is quite appropriate that we give it special attention.

#### RARE COMMUNITIES

**267.** Public Concern: The Forest Service should protect rare communities and habitat.

**Response:** We agree. Please see the Rare Community section in both the Revised Forest Plan and FEIS.

**268.** Public Concern: The Forest Service should provide greater detail and expand communities listed in Prescription 1.G to incorporate data and priorities submitted by the Nature Conservancy and Kentucky State Nature Preserves Commission. The Forest Service should specify protections for rare communities and designate larger protective areas around rare communities.

**Response:** We used information provided by TNC and KSNPC, as well information from other sources, to develop the Rare Community prescription. We developed a prescription area (management zone) for rare communities and included direction in the Revised Forest Plan that will allow us to achieve the desired future condition. In some instances we differ on what constitutes a rare community and how to define them.

**269.** Public Concern: The Forest Service should prevent over-visitation in rare communities.

**Response:** In the Revised Forest Plan, 1.G-Objective-1.D and standards 1.G.Rec-2 and 1.G.Rec-3 address this concern.

**270.** Public Concern: The Forest Service should prohibit concentrated public use within rare community zones to include the entire watershed.

**Response:** This concern is addressed site-specifically, as needed.

271. Public Concern: The Forest Service should specify standards for rare aquatic communities.

**Response:** The Riparian Corridor prescription area encompasses all aquatic communities. The designation of aquatic macroinvertebrate assemblage indices as a monitoring need will ensure monitoring of these important communities.

**272.** Public Concern: The Forest Service should modify standards regarding rare communities, as recommended.

**Response:** After reviewing the recommendations we have determined that the standards are adequate as stated in the Proposed Revised Forest Plan.

**273.** Public Concern: The Forest Service should not attempt to maintain rare communities in stable conditions.

**Response:** We have added some clarification in the Setting description for the Rare Communities prescription area of the Revised Forest Plan and in the Rare Communities section in Chapter 3 of the FEIS.

### **274.** Public Concern: The Forest Service should clarify whether warm season grasses/forbs fit within the rare community prescription.

**Response:** They are included within the prescription area. Please see the Setting description under Native Warm-season Grassland in the Rare Communities prescription area of the Revised Forest Plan.

### **275.** Public Concern: The Forest Service should specify bottomland hardwood wetlands as a rare community.

**Response:** We have identified swamps as rare communities and would expect that *hardwood wetlands* are included in this community.

#### **276.** Public Concern: The Forest Service should mention all rare community types in 1.G-Obj-1.E, or none.

**Response:** We did not include all seeps in the Rare Community prescription area, only those with federally listed, Forest Service Sensitive or Daniel Boone National Forest Conservation species in them.

#### **277.** Public Concern: The Forest Service should apply "restore or reestablish" in 1.G-Obj-1.F to all communities.

**Response:** We have clarified this objective in the Revised Forest Plan to apply to all rare communities.

#### **278.** Public Concern: The Forest Service should expand rare community management zones beyond wetlands.

**Response:** We disagree. We believe that direction provided in the Revised Forest Plan will allow us to manage these rare communities appropriately, as defined.

### **279.** Public Concern: The Forest Service should group rare communities that have similar hydrological regimes.

**Response:** We chose to separate them so that the specific needs each community would be addressed individually.

### **280.** Public Concern: The Forest Service should prohibit the placing of an impoundment in any rare community, not just canebrakes.

**Response:** Canebrakes are specifically mentioned because of their usual topographic position on the landscape. Any proposal to create an impoundment will take into consideration other rare community concerns on a site-specific basis.

#### **ECOSYSTEM/HABITAT COMPOSITION AND FUNCTION**

### **281.** Public Concern: The Forest Service should identify habitat types that need buffering and broad scale ecosystem management as well as develop measures of success.

**Response:** The habitat objectives have been designed to be large enough to not require "buffering." Please see Chapter 3 of the Revised Forest Plan.

### **282.** Public Concern: The Forest Service should develop and implement habitat restoration for habitats used by migratory birds.

**Response:** Goal 1 and its subgoals, and several of the prescription areas in the Revised Forest Plan provide a range of habitat conditions for these species.

### **283.** Public Concern: The Forest Service should develop desired future conditions specifying that habitat will be provided for game species as well as for threatened and endangered species.

**Response:** Planning regulations in the National Forest Management Act require us to provide for diversity across the landscape. Our analysis indicates that our mix of prescription areas allows for a diversity of habitat for all species. Please see Goal 11 of the Revised Forest Plan and the various prescription areas. See also the Demand Species section in Chapter 3 of the FEIS.

### **284.** Public Concern: The Forest Service should provide adequate habitat for game birds and songbirds.

**Response:** Goal 1 and its subgoals, and several of the prescription areas in the Revised Forest Plan provide a range of habitat conditions for these species.

### **285.** Public Concern: The Forest Service should include insect and disease habitat components, and pit and mound habitat components.

**Response:** Insects and disease will occur on the landscape regardless of whether we specifically provide for them. We will respond to such outbreaks on a site-specific basis. Pit and mound habitat will be provided for by wind events across the National Forest.

#### **286.** Public Concern: The Forest Service should relocate all activities that disturb the ecology or habitats of forest communities.

**Response:** Proposed activities are designed to create habitats within forest communities. Some habitats require disturbance to restore or maintain them. The effects of our management activities are analyzed on a site-specific basis.

### **287.** Public Concern: The Forest Service should manage the Daniel Boone National Forest as large blocks of intact forest, and not create diverse habitats for biodiversity.

**Response:** Planning regulations for the National Forest Management Act require us to provide for diversity across the landscape. Our mix of prescription areas allows for both large blocks and a diversity of other habitat.

### **288.** Public Concern: The Forest Service should not create open habitats, but instead, implement cooperative agreements with private landowners.

**Response:** We recognize that it is not necessary for the Daniel Boone National Forest to provide large blocks of 100 or more acres of open habitat across the landscape. However, many species on the National Forest benefit from small (1/4 to 10 acre) openings and for these we have included open habitat objectives.

### **289.** Public Concern: The Forest Service should implement the Habitat Diversity Emphasis prescription.

**Response:** The Revised Forest Plan includes this prescription area.

### **290.** Public Concern: The Forest Service should clarify numbers of acres reported for the Habitat Diversity Emphasis Area, community descriptions, and habitat components to correct discrepancies.

**Response:** Numbers used in the Habitat Diversity Emphasis prescription for various habitats do not necessarily translate directly to numbers in, for example, the Vegetation cover section of the FEIS. They are designed for different purposes. The objectives for acres within the Habitat Diversity Emphasis prescription area have been clarified in the Revised Forest Plan. Forestwide standards also apply to the Habitat Diversity Emphasis prescription area.

## **291.** Public Concern: The Forest Service should specify an objective to manage the Habit Diversity Emphasis Area that will provide permanent forest openings of diverse, natural herbaceous vegetation and trees.

**Response:** Goal 1.5 of the Revised Forest Plan emphasizes native grasses and their associated forbs. We agree that trees and shrubs are appropriate components in many cases. The need for inclusion of these components will be determined site specifically at the project level.

## **292.** Public Concern: The Forest Service should specify that desired habitat condition is the primary purpose for the Habitat Diversity designation, define habitat diversity, and specify how goals will be prioritized and conflicts resolved.

**Response:** What the commenter suggests is specified and explained in the Desired Future Condition section of the Habitat Diversity Emphasis prescription area (Chapter 3, Revised Forest Plan). Habitat diversity is defined in the glossary. Goals have not been prioritized, since all are important in the management of the National Forest. Any conflicts will be resolved during project planning and decision making.

### **293.** Public Concern: The Forest Service should clarify, modify, and specify additional goals and objectives within the Habitat Diversity Prescription Area.

**Response:** Direction in the Habitat Diversity prescription area of the Revised Forest Plan is appropriate for achieving the desired future condition.

#### 294. Public Concern: Early successional woodland habitat should be permitted in riparian areas.

**Response:** The Riparian prescription area management direction allows for the development of shrub openings and open canopy/shrub areas.

### **295.** Public Concern: The Forest Service should specify more standards within the Habitat Diversity Prescription Area.

**Response:** The Forestwide direction presented in Chapter 2 of the Revised Forest Plan, as well as the Desired Future Condition, Goals, and Objectives in the Habitat Diversity Prescription, provide adequate direction for this area.

## **296.** Public Concern: The Forest Service should provide a scientific rationale and data for each Habitat Diversity Prescription Area objective, and conduct independent peer review of habitat designation.

**Response:** We believe we have developed a mix of habitats consistent with planning regulations, the need to provide habitat for species on the National Forest, and the indications of past conditions in the area. In addition, endangered species and migratory bird personnel of the U.S. Fish and Wildlife Service have reviewed the Revised Forest Plan's management direction. Please see the Viability section in Chapter 3 of the FEIS.

### **297.** Public Concern: The Forest Service should not implement the Habitat Diversity Prescription Area because of a lack of scientific basis for conditions such as woodlands and grasslands.

**Response:** There is scientific evidence that indicates a need for such habitat (see FEIS, Chapter 3, Viability). However, we are taking a conservative approach and plan on monitoring the results of this new management direction. The Revised Forest Plan can be amended if monitoring discloses such a need.

### **298.** Public Concern: The Forest Service should establish openings other than those created through forest regeneration.

**Response:** Goal 1.5 of the Revised Forest Plan addresses the need for grassland habitat.

### **299.** Public Concern: The Forest Service should not conduct grapevine control in the Ruffed Grouse Emphasis Prescription Area.

**Response:** Grapevine control may be considered on a site-specific basis taking into account the overall condition of grouse habitat.

#### **300.** Public Concern: The Forest Service should maximize soft mast production.

**Response:** Specific habitat conditions such as soft mast production will be considered site specifically during project planning and decision making.

### **301.** Public Concern: The Forest Service should demonstrate scientific evidence of the historical presence and distribution of habitat before arbitrarily creating new habitat.

**Response:** We believe we have developed a mix of habitats consistent with planning regulations, the need to provide habitat for species on the National Forest, and the indications of past conditions in the area we have. Please see the Viability section in Chapter 3 of the FEIS.

### **302.** Public Concern: The Forest Service should implement Goal 1.3 and Objective 1.3.A to acquire high elevation forest habitat.

**Response:** We agree. We have made a correction in elevations in Objective 1.3.A in the Revised Forest Plan based on potentially available land within the proclamation boundary.

#### **303.** Public Concern: The Forest Service should protect large dead/dying trees.

**Response:** Please see the Old-growth sections in Chapter 3 of the Revised Forest Plan and Chapter 3 of the FEIS. Additional standards and objectives have been included in the Habitat Diversity Emphasis prescription area to address management of snags.

#### **304.** Public Concern: The Forest Service should clarify text for snags and roost trees.

**Response:** We have made changes in Chapters 2 and 3 of the Revised Forest Plan for clarification.

#### **305.** Public Concern: The Forest Service should modify DB-WLF-2 regarding the tracking of snags.

**Response:** This standard has been modified. Please see Chapter 2 of the Revised Forest Plan.

### **306.** Public Concern: The Forest Service should specify that all objectives under Goal 1.E.2.A. seek to provide habitat for flora and fauna within riparian areas.

**Response:** We have made a change to 1.E-Goal 2. in the Revised Forest Plan to clarify this point.

**307.** Public Concern: The Forest Service should change the desired future condition for the Habitat Diversity Emphasis Prescription Area so it will support mature or climax forest communities.

**Response:** The desired future condition for the Habitat Diversity Emphasis prescription area includes components for mature forest communities. See Chapter 3 of the Revised Forest Plan.

#### FRAGMENTATION AND EDGE EFFECTS

**308.** Public Concern: The Forest Service should prevent forest fragmentation and habitat loss and disturbance. The Forest Service should analyze the effects and cumulative effects of all fragmentation. The Forest Service should prevent fragmentation by establishing a "core area" that is protected, with timber harvest activities allocated to the periphery.

**Response:** We examined the fragmentation issue in Chapter 3 of the FEIS. Non-forest land uses that fragment the forest landscape are mostly the result of urbanization. This concern will be addressed through land acquisition and cooperative planning with local and state governments. (See Forestwide standard DB-LAND-2 in the Revised Forest Plan) Management activities that could contribute to within-forest fragmentation should have little effect on the broader scale landscape (see Table 3 - 70 in the DEIS). Consequently, core areas were deemed unnecessary to maintain suitable interior forest conditions.

### **309.** Public Concern: The Forest Service should modify text to remove loopholes that allow fragmentation.

**Response:** Within-forest habitat fragmentation is somewhat inversely related to biological diversity. The mix of habitats across the National Forest is planned to sustain the diverse assemblage of forest species found on the Daniel Boone National Forest. This includes provisions for species that may be experiencing negative effects from fragmentation elsewhere throughout their range.

#### **310.** Public Concern: The Forest Service should not create forest openings and early successional habitat.

**Response:** The Revised Forest Plan focuses on providing habitat diversity to sustain the wide variety of plant and animals found on the Daniel Boone National Forest. Timber harvest is a tool that may be used where it is most efficient in developing and sustaining habitat, as projected in the desired future conditions for each prescription area. Although forest edge may reduce habitat suitability for interior species, it adds habitat diversity. Edge created by developing and maintaining early-age forest habitat (0-10 year age class) should not limit opportunities to sustain interior dependant species.

#### **WILDLIFE (GENERAL)**

#### 311. Public Concern: The Forest Service should protect wildlife from harm and disturbance.

**Response:** Provisions for the welfare of wildlife were analyzed in the DEIS, which resulted in appropriate protective and enhancement measures included throughout the Revised Forest Plan.

### **312.** Public Concern: The Forest Service should modify Goal 11 to specify that wildlife will be managed for healthy, balanced, stable populations, instead of for recreational opportunities.

**Response:** The Revised Forest Plan focuses on providing habitat diversity to sustain the wide variety of plants and animals found on the National Forest. The plan also emphasizes the maintenance and restoration of ecological processes and functions while providing for multiple public benefits with added emphasis on recreation.

#### **313.** Public Concern: The Forest Service should consider wildlife factors, as recommended, in the Lick Creek Area.

**Response:** The Revised Forest Plan has neither a management area nor a prescription area called the "Lick Creek Area." Consequently, since there are many Lick Creeks on the Daniel Boone National Forest, we're not sure to what area the commenter was referring. This seems to be a site-specific concern. Nonetheless, the Revised Forest Plan focuses on providing habitat diversity to sustain the wide variety of plant and animals found on the National Forest.

# **314.** Public Concern: The Forest Service should conduct viability analysis on black bear and elk. The Forest Service should conduct analysis on the habitat needs of black bear, disclose current population numbers, and provide remote forest habitat. The Forest Service should specify management objectives for elk.

**Response:** The black bear was not considered as a management indicator species because recent research indicates their response to managements actions differ according to maturity and sex. The level of monitoring required to differentiate between age, sex, and management actions is beyond our means. The North American elk was not considered as a management indicator species because of its recent arrival (via re-introduction) in Kentucky and its limited distribution on the Daniel Boone National Forest. The Kentucky Department of Fish and Wildlife Resources is currently funding research and monitoring projects to learn more about the lifestyle of elk in Kentucky. See the MIS section in Appendix B of the FEIS.

### **315.** Public Concern: The Forest Service should analyze the effects of management actions on demand species.

**Response:** Please see Chapter 3 of the FEIS and the Viability Assessment For The Daniel Boone National Forest, July 2003. The Viability Assessment is part of the planning records and is available for inspection upon request.

### **316.** Public Concern: The Forest Service should analyze and disclose the rationale for goals and objectives for the management of beavers and dams.

**Response:** The primary purpose for 1.E-Objective 2.B and 2.C is to provide needed habitat for the birds listed there, although beavers will also benefit from this habitat. The primary purpose for 1.E-Goal 7 is to address barriers to the movement of aquatic fauna; the barriers that are the subject of this goal are low water crossings, culverts, fords, and other similar structures.

#### **Ruffed Grouse**

#### **317.** Public Concern: The Forest Service should create more grouse habitat.

**Response:** Suitable early-aged habitat will be created across the Daniel Boone National Forest through reforestation efforts, in addition to the Ruffed Grouse Emphasis prescription area. Harvest and regeneration during the first 10 years of the Revised Plan will produce about 25,000 acres in the 0-10 year age class, well distributed across the National Forest. Our analysis indicated that this will provide adequate habitat to sustain a huntable ruffed grouse population on the National Forest, as well as maintain an age structure needed to support other wildlife species dependant on early successional forest habitat.

### **318.** Public Concern: The Forest Service should designate land as Ruffed Grouse Emphasis Area in the Redbird Ranger District.

**Response:** Making an addition to the Ruffed Grouse Emphasis prescription area on the Redbird Ranger District is covered in 3.H.1-Objective 1.D of the Revised Forest Plan. Further examination of the Disrict is needed to identify the area best suited for this management emphasis.

#### 319. Public Concern: The Forest Service should create 5 to 20-acre stands for grouse habitat.

**Response:** The harvest and regeneration stand size objective (3.H.1-Objective 1.B.) in the Ruffed Grouse Emphasis prescription area has been modified to reflect the recommendation.

#### 320. Public Concern: The Forest Service should not create additional grouse habitat.

**Response:** The Ruffed Grouse Emphasis prescription area was developed to provide high-level population centers during naturally occurring low cyclic periods. These areas will sustain huntable ruffed grouse populations and add a prominent early-age forest element to the landscape diversity of the Daniel Boone National Forest. Species associated with early-age habitat will find near optimal conditions within these prescription areas, a condition not found elsewhere on the National Forest.

#### **321.** Public Concern: The Forest Service should rename the Ruffed Grouse Emphasis Area as Early Successional Woodland Habitat Area.

**Response:** Woodland is a term that describes a sparse forest condition and is not a planned component of these areas. Woodland is defined in the desired future condition of the Habitat Diversity Emphasis prescription area. The desired future condition provides for representative early-age associated forest species in this prescription area.

## **322.** Public Concern: The Forest Service should provide a better explanation of ruffed grouse habitat, young thickets, and early successional forest and the relationship of fire management to rare communities.

**Response:** The application of prescribed fire within the ruffed grouse and early-age emphasis areas will be primarily within the mature upland forest component. Fire releases stored nutrients that stimulate new growth and increase soft mast production. It also favors the retention and maintenance of shade intolerant species such as oaks. Of course, climatic conditions at the time of burning and burn frequency are critical considerations in achieving specified objectives. The identification and management of rare communities are primary considerations in all prescription areas. Appropriate treatments will be applied to protect and ensure the continued persistence of identified rare communities.

**323.** Public Concern: The Forest Service should require that grouse drumming logs be located within regeneration areas.

**Response:** Standard 3.H.1-WLF-1 has been modified in the Revised Forest Plan to provide for ruffed grouse drumming logs.

**324.** Public Concern: The Forest Service should collaborate with the Ruffed Grouse Society on habitat projects.

**Response:** This is outside the scope of the Revised Forest Plan, but we look forward to cooperative opportunities to work with the Ruffed Grouse Society on individual projects and building a strong partnership in management of the ruffed grouse and other associated forest species.

**325.** Public Concern: The Forest Service should explain how timber harvest and road building in grouse emphasis areas will maintain Semi-primitive Non-motorized and Semi-primitive Motorized recreational experiences.

**Response:** Indeed, planned activities and management provisions will result in a roaded natural and roaded modified setting. Appropriate changes have been incorporated into standard 3.H.1-REC-1 in the Revised Forest Plan.

#### **Black Bear**

**326.** Public Concern: The Forest Service should preserve and manage habitat for black bear.

**Response:** Habitat needs for black bear were considered in the Viability Assessment for the Daniel Boone National Forest, July 2003. This document is part of the planning record and is available for inspection upon request.

327. Public Concern: The Forest Service should not portray the black bear as a nuisance.

**Response:** The reference to "nuisance" bears has been removed from the Revised Forest Plan.

**328.** Public Concern: The Forest Service should inform the public about interacting with bears and make refuse containers bear-proof.

**Response:** We have addressed this concern through Objective 7.4.A and Goal 15 in the Revised Forest Plan.

**329.** Public Concern: The Forest Service should place more importance on black bear and analyze the effects of management actions on black bear.

**Response:** As a framework for decision-making, the Revised Forest Plan does not commit the Forest Service to any specific project or management action. Rather, it describes general management direction. Habitat disturbance factors for the black bear (and other species) are generally analyzed at the time a management action is proposed.

#### **330.** Public Concern: The Forest Service should analyze the effects of poaching, other disturbance activities, and cut sites and escape cover on black bears.

**Response:** Illegal activities are not permitted in any of the alternatives considered. Therefore, it is the same for all alternatives. As a framework for decision-making, the Revised Forest Plan does not commit the Forest Service to any specific project or management action. Rather, it describes general management direction. Habitat disturbance factors for the black bear (and other species) are generally analyzed at the time a management action is proposed.

**331.** Public Concern: The Forest Service should analyze whether or when bear hunting will be permitted and the effects that hunting will have on bear populations.

**Response:** The Kentucky Department of Fish and Wildlife Resources (KDFWR) is responsible for regulating hunting and fishing seasons; bag, creel, and possession limits; buying, selling, and transporting fish and wildlife; as well as methods and devices used to take fish or wildlife.

#### **Avifauna**

**332.** Public Concern: The Forest Service should conduct viability analysis on all bird species of conservation concern.

**Response:** Bird species of conservation concern and reasonably expected to be found on the National Forest were included initially in the analysis. However, some were filtered out based on strong Daniel Boone National Forest populations. See the Viability section in Chapter 3 of the FEIS for more information.

**333.** Public Concern: The Forest Service should protect birds of prey.

**Response:** All birds of prey are protected under the Endangered Species Act. The management direction in the Revised Forest Plan facilitates compliance with the Act.

**334.** Public Concern: The Forest Service should implement stronger avian monitoring, habitat restoration, objectives, and active management.

**Response:** Please see Appendix B, MIS section of the FEIS, and Appendix D of the Revised Forest Plan for information related to monitoring priorities.

335. Public Concern: The Forest Service should conduct annual bird monitoring.

**Response:** We have been conducting such monitoring for a number of years and it is our intent to continue. Please see the monitoring task table in Appendix D of the Revised Forest Plan.

**336.** Public Concern: The Forest Service should describe the role that the Daniel Boone National Forest plays for the cerulean warbler, a high priority species.

**Response:** Please see Objective 1.1.B. in Chapter 2 of the Revised Forest Plan, and the Partners in Flight Landbirds section in Chapter 3 of the FEIS.

#### **AQUATIC WILDLIFE AND HABITAT**

### **337.** Public Concern: The Forest Service should conduct realistic assessments of aquatic species viability and watershed health.

**Response:** Our assessment model was developed to evaluate alternatives in forest plans and to establish priority work at the planning scale. The Watershed Health Index, however, does not necessarily indicate an excellent or poor watershed but broadly categorizes the watersheds based on the sediment prediction/aquatic viability relationship. Even in watersheds classified as excellent, Forest Service objectives are to maintain or improve aquatic health through the implementation of Forestwide standards and the Riparian Corridor prescription area. The organisms selected for the assessment were those that either currently or historically occurred on or near the Daniel Boone National Forest.

### **338.** Public Concern: The Forest Service should develop management strategies to protect and restore aquatic habitats rated as average or at-risk under the Watershed Health Index.

**Response:** Forest Service objectives are to maintain or improve aquatic health through the implementation of Forestwide standards and the Riparian Corridor prescription area. In response to comments, however, the WHI has been modified, and cutoffs based on Forest Service ownership have been removed. All watersheds with Forest Service ownership will be addressed. This process has been renamed the *Watershed Condition Ranking* to reduce confusion.

## **339.** Public Concern: The Forest Service should designate watersheds that provide critical habitat for proposed, endangered, threatened, and sensitive species as Watershed Restoration Areas or Aquatic Habitat Areas.

**Response:** Any proposed, endangered, threatened, and sensitive species found within a watershed will be specifically considered when activities are proposed. Based upon individual site characteristics, additional protections may be implemented.

#### **340.** Public Concern: The Forest Service should protect aquatic habitats.

**Response:** We agree. The Revised Forest Plan includes management direction intended to both protect and enhance aquatic habitats.

### **341.** Public Concern: The Forest Service should place equal emphasis on water quality and aquatic species as on riparian habitat.

**Response:** The Revised Forest Plan is designed to avoid and minimize undesirable effects on aquatic resources through the Forestwide standards and the Riparian Corridor prescription area.

### **342.** Public Concern: The Forest Service should provide details on fish data and specify streams that support trout.

**Response:** The figures used are currently accurate for the Daniel Boone National Forest. Some streams on the Daniel Boone National Forest that have been stocked in the past are no longer stocked, primarily because of adverse impacts to native species. The Kentucky Department of Fish and Wildlife Resources does stock other streams not on lands managed by the Daniel Boone National Forest.

#### Fisheries (Sport)

343. Public Concern: The Forest Service should specify protective measures for muskie and trout.

**Response:** Muskie and trout are both considered "sport fish" by the Kentucky Department of Fish and Wildlife Resources (KDFWR). The Daniel Boone National Forest recognizes KDFWR as the responsible agency for regulating hunting and fishing seasons; bag, creel, and possession limits; buying, selling, and transporting fish and wildlife; as well as methods and devices used to take fish or wildlife

#### **CANEBRAKES**

**344.** Public Concern: The Forest Service should estimate the size of pre-European settlement canebrakes.

**Response:** We agree. This task is to be attempted during the next 10-year planning cycle.

**345.** Public Concern: The Forest Service should restore native canebrake communities in patches greater than 10 acres.

**Response:** In the current 10-year planning cycle, we expect the 10-acre size to be our practical limit. We have the ability to site-specifically exceed 10 acres where there is the opportunity to do so and where such effort is likely to succeed.

#### **GRASSLANDS, SAVANNAHS, AND OPEN WOODLANDS**

**346.** Public Concern: The Forest Service should establish more native warm season grasses.

**Response:** Goal 1.5 and its associated objectives in Chapter 2 of the Revised Forest Plan provide management direction for grassland habitat.

**347.** Public Concern: The Forest Service should specify guidelines for the selection and adaptation of native components of planned natural areas and use of native/local genotypes.

**Response:** These concerns are addressed at a site-specific project level.

**348.** Public Concern: The Forest Service should maintain grassy openings along riparian zones and clifflines as well as along roads and landings used in timber harvest.

**Response:** Goal 1.5 and its associated objectives in the Revised Forest Plan establish management direction for grassy openings at a programmatic level. Site-specific considerations during project planning and decision-making will determine where they are established and maintained.

**349.** Public Concern: The Forest Service should use native grass species to restore disturbed sites and clearings.

**Response:** Site-specific considerations during project planning and decision making determine which species will be used.

**350.** Public Concern: The Forest Service should consult with partner agencies and academics to promote open grassy oak forests or pine-oak woodlands in uplands.

**Response:** Our intent is to look at physical and biological characteristics of a site. Please see Objective 1.1.F. in Chapter 2 of the Revised Forest Plan.

**351.** Public Concern: The Forest Service should disregard biased viability analysis and create openareas and grasslands.

**Response:** We followed a process developed by Forest Service specialists that considers multiple requirements of forest planning regulation.

**352.** Public Concern: The Forest Service should not manipulate the forest to create grasslands, savannahs, pine forests, or open woodlands.

**Response:** These areas may break up a uniformly forested viewshed; however, not everyone views such conditions as visually unpleasant. Scientific evidence indicates that a limited amount of grasslands were among the many conditions found in eastern Kentucky's pre-European landscape (see Viability section in Chapter 3 of the FEIS).

### **Transportation**

#### TRANSPORTATION MANAGEMENT DIRECTION

**353.** Public Concern: The Forest Service should modify Objective 12.1A by removing the phrase "wherever possible."

**Response:** Such a change would result in a statement that reads as if it were a standard. This direction was written as an objective, since road relocation may not always be possible or necessary.

**354.** Public Concern: The Forest Service should designate Objectives 12.1.B and 12.1.C as standards.

**Response:** We considered the suggestion but decided against it. Objectives 12.1.B and 12.1.C may or may not be attainable in any given year, but may be attainable over the planning period.

**355.** Public Concern: The Forest Service should limit road building on forest land. The Forest Service should specify strong standards that limit road densities on the Forest. The Forest Service should decommission surplus roads.

**Response:** The Revised Forest Plan, along with Forest Service handbooks and manuals, provide guidance for determining road needs as well as the need for road closure and decommissioning. Decisions on road construction, reconstruction, and decommissioning are best handled at the watershed or project level, based upon site-specific information and analysis. Density standards for open roads are established only when supported by site-specific, science-based analysis. An interdisciplinary science-based roads analysis at the appropriate scale will be used to inform planners and decision makers of needed and unneeded roads and to recommend priorities for implementation. When open road density standards are warranted, measures will be taken to enforce the standards. Objective 12.1.A applies to both roads and trails.

**356.** Public Concern: The Forest Service should develop a standard that requires the closure of any road that creates adverse environmental effects or is costly to maintain.

**Response:** We believe that Forestwide objectives under Goal 12 in the Revised Forest Plan meet this need.

**357.** Public Concern: The Forest Service should modify several transportation related standards in the 1.G-Rare Communities Prescription Area, as recommended.

**Response:** We considered the recommendations but concluded that the present standards are sufficient to provide for continuation and protection of the rare communities.

**358.** Public Concern: The Forest Service should develop special road standards for the Habitat Diversity Emphasis Area.

**Response:** Road management objectives for individual roads are developed with consideration of the purpose and need for the road, and help determine road design elements, including surfacing and maintenance. This planning is done in accordance with Forest Service handbooks and manuals, and must comply with management direction in the Revised Forest Plan, including the objectives within Goal 12.

**359.** Public Concern: The Forest Service should clarify how Forestwide standard DB-VEG-11 applies to roadside maintenance activities within the Daniel Boone National Forest.

**Response:** The standard as worded does not include any qualifications, so any use of herbicides whether along roads or elsewhere must be posted.

**360.** Public Concern: The Forest Service should modify standards DB-ENG-1-4 to protect riparian areas, as recommended. The Forest Service should specify in DB-ENG-1 that protected zones for caves and sinkholes include the entire cave watershed. The Forest Service should modify Goal 12.1 and Objective 12.1.A, as recommended. The Forest Service should ensure that standards protect aquatic resources from effects of increased road use and maintenance.

**Response:** We considered the recommendations but decided not use them to make changes. An interdisciplinary, science-based roads analysis at the appropriate scale will inform planners and decision makers whether roads are needed or unneeded roads and will recommend priorities for implementation. Road standards should be established only when supported by site-specific, science-based analysis. Decisions on road construction, reconstruction, and decommissioning are best handled at the watershed or project level, based upon site-specific information and analysis.

#### **ROAD MANAGEMENT**

**361.** Public Concern: The Forest Service should oppose construction of any new interstates or highway corridors through the forest, and establish standards that protect the forest from these activities.

**Response:** Highway projects can have undesirable effects on national forest resources, but they can also meet important needs of local communities and society in general. A national Memorandum of Understanding between the Forest Service and the Federal Highway Administration (FHWA) specifies that the Forest Service will have opportunities to provide input to the FHWA on federal highway projects that could have effects on national forest land. The Daniel Boone National Forest provides such input for the environmental analysis for federal highway proposals that affect National Forest, including information pertaining to whether the proposal is consistent with management direction and desired future conditions in the Revised Forest Plan.

**362.** Public Concern: The Forest Service should correct inconsistencies in Tables 2-30, 2-32, and C-2.B.

**Response:** Appropriate changes have been made in the tables.

**363.** Public Concern: The Forest Service should inventory and map all roads and trails, specify roads and road densities for management prescriptions. The effects of roads and road construction and maintenance should be analyzed and disclosed. The Forest Service should conduct a roads analysis, close more roads, list roads to be decommissioned, and list roads that create environmental ill effects or are too costly to maintain.

Response: The effects analysis at the programmatic, forest plan level is useful in comparing and evaluating alternatives on a Forestwide basis. However, it is not intended to provide sufficient detail to be applied to specific locations on the National Forest. Potential effects of additional roads were considered in the analysis of environmental consequences, based upon existing forest conditions as well as standards and guidelines in existing handbooks and manuals. A Forest-scale roads analysis has been completed to help inform decision makers. Again, it was not intended to provide site-specific analysis. Watershed and project-scale analysis will be used to inform site-specific project decisions. It is at these levels of analysis that changes in management for individual roads will be identified and the effects of implementing a project alternative will be evaluated and disclosed. Density standards for open roads should be established only when supported by site-specific, science-based analysis. Relying on an interdisciplinary, science-based roads analysis at the appropriate scale, planners and decision makers will determine whether roads are needed and then recommend priorities for implementation. For these reasons we have decided against establishing road density standards in the Revised Forest Plan.

**364.** Public Concern: The Forest Service should not use taxpayer money to study a proposed route for Interstate 66 through the Forest. The Forest Service should request that the Kentucky Department of Transportation restore the name "Daniel Boone Parkway" to what has recently become the "Hal Rogers Parkway."

**Response:** These concerns are outside the scope of the Revised Forest Plan because the Kentucky Transportation Cabinet and the Federal Highway Administration are the agencies responsible for this study, not the Forest Service.

**365.** Public Concern: The Forest Service should provide adequate parking areas at gated roads, access points, and rights-of-way.

**Response:** Forestwide Goal 12 generally gives such direction. Specific site design is not considered at the programmatic, forest-plan level.

**366.** Public Concern: The Forest Service should identify the basis upon which the assertion is made that temporary roads result in minimal loss of soil productivity.

**Response:** Chapters 2 and 3 of the Revised Forest Plan, along with the Forest Service Manual and handbooks provide for the protection of soils. The effects of temporary roads have been removed in the FEIS as indicators of "Short-Term Effects" and are shown as "Long-Term Effects."

**367.** Public Concern: The Forest Service should explain how road densities affect rare aquatic species, diversity, and habitat.

**Response:** Road densities were not used to answer the questions you pose. See the Response to Public Concern 363.

**368.** Public Concern: The Forest Service should ensure that new bridges are constructed to be "batfriendly."

**Response:** Such construction standards may be considered and recommended on a site-specific basis for bridges on both National Forest System roads and state and county roads.

**369.** Public Concern: The Forest Service should ensure that well-designed culverts are used, including flood-plain culverts. The Forest Service should modify Forestwide standard DB-ENG-3 and conduct a complete environmental review when considering potential stream crossings. The Forest Service should engineer stream crossings and hardened crossings to allow natural movements of aquatic species during normal flow periods.

**Response:** Road design, including culvert design and placement, is done in accordance with Forest Service handbooks and manuals and reflects the road objective. This concern is best addressed at a watershed or project decision level. An interdisciplinary, science-based roads analysis at the appropriate scale will be used to inform planners and decision makers of needs for specially designed water crossings. Existing direction provides for the passage of aquatic animals during normal stream flow.

**370.** Public Concern: The Forest Service should specify a standard that temporary access roads may be built in riparian areas.

**Response:** This direction can be found in 1.E-Objective-5.B.

#### TRAIL MANAGEMENT

**371.** Public Concern: The Forest Service should better maintain Daniel Boone National Forest hiking trails. Standards for trails should require posting of allowed and prohibited uses at trailheads and in published materials. Also, physical barriers should be erected and trail rules strictly enforced to protect trails.

**Response:** These types of recommended activities are considered during implementation of the Revised Forest Plan and will be utilized based upon the site-specific conditions.

**372.** Public Concern: The Forest Service should inspect and maintain trails annually, and maintain trails to Best Management Practices at least every three years.

**Response:** The objective of maintaining 20 percent of our trails annually does not mean every trail will get attention only every 5 years. This objective allows us to focus on those trails that may need more frequent attention while other trails may not need attention so often. Some Daniel Boone National Forest trails get attention almost annually. Overall, we should be maintaining 20 percent of our total miles annually.

**373.** Public Concern: The Forest Service should develop a comprehensive plan for the Sheltowee Trace Trail and partner with agencies to develop standards for marking and maintaining the trail.

**Response:** Such a strategy already exists.

**374.** Public Concern: The Forest Service should specify trails that will be closed and explain the reasons for closure.

**Response:** This will be done on a site-specific basis as we move to implementing the Revised Forest Plan.

#### Recreation

### **RECREATION MANAGEMENT (GENERAL)**

### **375.** Public Concern: The Forest Service should clarify the description of 'experiences' on page 3-46 of the Plan.

**Response:** Recreation experiences relate to how recreationists may respond to the setting they encounter on their visit to a national forest (remoteness, facilities, concentrations of people, etc.). People react differently to different levels of facility development and/or levels and types of contacts with other users. For instance, some may feel fearful in a remote, primitive setting and prefer more conveniences while others prefer the serenity of a remote setting.

### **376.** Public Concern: The Forest Service should designate the Clifty Wilderness and Wolfpen Roadless Area as primitive under the Recreation Opportunity Spectrum.

**Response:** According to current interpretation of "primitive," there are almost no places in the eastern U.S. that would qualify for this classification, especially when compared to areas of the western U.S. In addition, there are locations within the Wolfpen area where heavy recreation use occurs, making it even more difficult to classify it as a primitive setting.

# **377.** Public Concern: The Forest Service should prohibit development of forest land for highly developed uses such as golf courses, highways, and motorized uses.

**Response:** To institute a blanket prohibition of such developments would not be in keeping with public sentiment. The Revised Forest Plan provides for a balanced spectrum of diverse recreation uses legally recognized as legitimate uses of a national forest. The vast majority of the National Forest is relatively undeveloped, but there are opportunities for development in certain areas. However, developments such as you mention would be few, and any proposal would have to undergo public scrutiny and input on a site-specific basis prior to approval.

### **378.** Public Concern: The Forest Service should emphasize recreation on forest land instead of timber harvest.

**Response:** We do have an emphasis on recreation. However, we also must protect and maintain the health of our natural resources through various means, including the judicious use of timber harvest.

#### 379. The Forest Service should not emphasize the "sale" of recreation as a marketable product.

**Response:** We do not manage recreation from a strict economic viewpoint, nor is it our intent to "sell" any programs. When deciding whether to invest public funds, however, we should consider the differing values, to the public we serve, of various recreational activities.

### **380.** Public Concern: The Forest Service should implement concrete steps to reduce the environmental effects of recreation. The EIS minimizes the full impact of recreation.

**Response:** We believe we have adequately recognized and addressed recreation impacts in the EIS and included direction in the Revised Forest Plan to address this issue. However, the Revised Forest Plan is a broad programmatic document and more detailed mitigation will be prescribed as site-specific projects are evaluated through the environmental analysis process.

# **381.** Public Concern: The Forest Service should explain how backcountry and high quality recreation along with scenic protection are provided on the Forest given the low amounts of wilderness as well as roadless, primitive, and remote areas.

**Response:** Public input has helped us establish the types and quality of recreation made available on the National Forest. We believe we have adequately provided for the types of qualities you mention. "High quality recreation" is perceived differently by different persons, as is the desire of the public for "back country" experiences. Land that doesn't qualify as "back country" for some, may be regarded as "wilderness" by others. We also believe we have provided for appropriate levels of scenic protection. Past public input and the 2002 National Visitor Use Monitoring Project give evidence of the public's satisfaction with Daniel Boone National Forest scenery. In this survey, the public rated the National Forest's scenic quality 4.6 out of 5.0.

**382.** Public Concern: The Forest Service should provide more dispersed, non-motorized recreation opportunities and trails and reduce the areas impacted by motorized recreation and extractive development.

**Response:** Based on public input we believe we have provided the appropriate mix of recreation opportunities within management limitations and the land's capabilities.

**383.** Public Concern: The Forest Service should analyze job gains created by recreation and people relocating to live near the forest.

**Response:** The significant social and economic effects of the alternatives are displayed in Chapter 3 of the FEIS under the Socioeconomic Environment.

**384.** Public Concern: The Forest Service should ensure that all commercial, non-motorized recreational activities are subject to strong guidelines, public involvement, required permits, and monitoring and enforcement.

**Response:** Our special use policy, including environmental analysis required by the National Environmental Policy Act, is used for approval of such activities on a case-by-case basis. All permits include provisions to protect the environment.

**385.** Public Concern: The Forest Service should clarify Goal 7.4 by defining "wildlife resistant facilities."

**Response:** Goal 7.4 and the associated objective in the Revised Forest Plan have been reworded for clarification. The term "wildlife resistant" is used as an alternative to such an outmoded term such as "bear proof" garbage cans. Rather than specie specific, (e.g. bear) the term wildlife is used to include other species (e.g. raccoons, opossums, bees).

**386.** Public Concern: The Forest Service should develop low-impact recreation on appropriate areas of the Forest, especially areas that would help local economies.

**Response:** We are planning on providing recreation areas that meet public needs and help local economies, with minimum environmental impacts.

**387.** Public Concern: The Forest Service should develop standards requiring Limits of Acceptable Change (LAC) for horseback riding, Cave Run Lake, Laurel River Lake, and the Red River Gorge.

**Response:** We agree that the LAC process would be helpful in the areas you mention. Objective 3.A. of the Red River Gorge prescription area calls for use of the LAC process and we have already started the process for the Red River Gorge and will further explore this process for other areas as we implement the Revised Forest Plan

**388.** Public Concern: The Forest Service should not construct recreational facilities near heritage sites, nor areas with proposed, endangered, threatened, and sensitive species within cliffline zones.

**Response:** While we feel that facilities, such as some trails, should be limited in this area we believe we need the flexibility to be able to enter this zone when impacts to these sensitive areas can be mitigated or avoided. There are such facilities that have been historically in this zone prior to it being established and these facilities are not causing unacceptable impact.

#### **ECOTOURISM**

**389.** Public Concern: The Forest Service should emphasize ecotourism on the Daniel Boone National Forest.

**Response:** We are involved in ecotourism councils and activities and try to ensure that these are considered in our management activities.

#### **USER CONFLICTS**

**390.** Public Concern: The Forest Service should provide a more detailed analysis and disclosure of "user conflict" effects in the Forest Plan's Summary of Issues.

**Response:** Such analysis is done primarily for site-specific projects and is not integral to the Revised Forest Plan management direction or EIS analysis of environmental consequences. This part of the Revised Forest Plan is simply a general statement as to what may occur when managing for different types of recreation opportunities.

#### RECREATION TYPES/OPPORTUNITIES

**391.** Public Concern: The Forest Service should take into account the needs of recreational users for activities such as hiking, rock climbing, and mountain biking.

**Response:** We considered the recommendation but we believe we have adequately addressed these activities in the Revised Forest Plan. We also believe that the FEIS adequately states the issues and addresses the concerns related to these recreation activities.

### MOTORIZED RECREATION (GENERAL)

**392.** Public Concern: The Forest Service should provide adequate off-highway vehicle opportunities on the Daniel Boone National Forest.

**Response:** We plan on continuing to provide more miles of environmentally sustainable off-highway vehicle (OHV) trails on the National Forest. Forestwide Goals 7.3 and 12.2 will lead to providing more OHV opportunities, and Objective 12.2.A. will result in improved user experiences on trails designated for OHVs.

**393.** Public Concern: Motorized OHV use is destructive to National Forest and nearby private lands, and not in accord with how the National Forests should be managed. Much of this use is illegal. The Forest Service should ban/limit motorized recreational use and off-highway vehicle use on National Forest land.

**Response:** Not all off-highway vehicle (OHV) use is destructive. We have provided for a limited amount of this activity as part of a broad spectrum of diverse and legally recognized recreation activities. The Revised Forest Plan provides for this activity in an environmentally sound manner. Because inadequately managed use of OHVs can be destructive, we have provided management direction in the Revised Forest Plan for resource protection. We will continue to address illegal activities while providing for legitimate recreational uses.

**394.** Public Concern: The Forest Service should better analyze the effects of off-highway vehicle use. There should be more differences in effects from this use between alternatives than what the DEIS indicates.

**Response:** Although total projected off-highway vehicle (OHV) trail length varies between 0 and 126 miles between the alternatives (EIS, Chapter 2, Issue 11), this impact occurs within a large (700,000 acre) analysis area. From this perspective, we found that the differences in OHV impact to resources would be negligible, given proper design, maintenance, and elimination of illegal trails, which is planned under Goal 12 (See FEIS, Chapter 3, Soil and Water).

**395.** Public Concern: The Forest Service should utilize mitigation technologies rather than closing or rerouting off-highway vehicle trails that do not meet management objectives.

**Response:** Mitigation techniques, other than closure or rerouting, are used whenever possible. However, in some circumstances closure or rerouting may still be necessary.

**396.** Public Concern: The Forest Service should prohibit off-road vehicle use in the Rare Communities Prescription Area.

**Response:** Off-highway vehicles are prohibited in rare community sites (1.G-REC-1). Within the broader rare community management zones, off-highway vehicle use is permitted only on trails designated for that use. Site-specific analysis will determine the course of action to take if these trails and rare communities overlap.

**397.** Public Concern: The Forest Service should change the definition of "semi-primitive motorized" as there is nothing primitive about motorized recreational uses.

**Response:** This is a standard classification that has been used nationwide for many years, and we believe it is still useful. The prefix "semi-" indicates that the area is partially primitive.

**398.** Public Concern: The Forest Service should change Objective 12.1.D to a goal.

**Response:** The objective has been restated as a goal, as suggested.

399. Public Concern: The Forest Service should change Objective 12.1.E to a standard.

**Response:** We considered the recommendation but decided that the objective should remain as stated in the Proposed Revised Forest Plan because there may be circumstances where a 150mile minimum is not feasible or desirable. Changing the objective to a standard would not afford us the flexibility to accommodate such circumstances.

**400.** Public Concern: The Forest Service should rewrite Standard 5.C-REC-1 to exclude off-highway vehicle use in Zone 2.

**Response:** We utilized direction from the Kentucky Division of Water pertaining to which zones should exclude off-highway vehicle use. Project-level analysis can require additional standards.

401. Public Concern: The Forest Service should not allow timber vehicles on trails.

**Response:** With adequate safety precautions, this temporary condition may be necessary in some places.

#### **VOLUNTEER SUPPORT FOR TRAIL MAINTENANCE**

**402.** Public Concern: The Forest Service should work with off-highway vehicle clubs and recruit them to participate in adopt-a-trail programs.

**Response:** We have had several partnerships with off-highway vehicle volunteers and would like to see this program expand (see Goal 14 in the Revised Forest Plan).

#### OFF-HIGHWAY VEHICLE FEES AND PERMITS

**403**. Public Concern: The Forest Service should implement a fee-based system for off-highway vehicle use.

**Response:** This fee system is already being implemented under a national demonstration program and will continue as long as the program remains in effect and where there is an adequate trail system. The White Sulphur ATV system on the Morehead Ranger District has been a fee area for two years.

#### **ENFORCEMENT OF OFF-HIGHWAY VEHICLE REGULATIONS**

**404.** Public Concern: Illegal OHV activity is a major problem and no new trails should be built until this problem is brought under control. The Forest Service should also educate off-highway vehicle users, post allowed uses, and install physical barriers.

**Response:** Illegal off-highway vehicle (OHV) activity is treated similarly in all alternatives considered for the Revised Forest Plan. This includes public education, appropriate signing and physical barriers. We will continue to target illegal OHV use for enforcement efforts as workforce constraints and other law enforcement priorities allow. Building no new trails penalizes the law-abiding public and could even increase illegal use in places. Where we have adequate trails, we find a reduction of illegal use.

### TRAILS (GENERAL)

# **405.** Public Concern: The Forest Service should incorporate user-created trails into the existing trail system.

**Response:** The vast majority of these illegal trails are poorly located and cause much resource damage. In most cases, the Daniel Boone National Forest does not have the resources to properly maintain all these trails, so they are normally targeted for closure. Occasionally, some of these trails have been added to the system where appropriate.

### **406.** Public Concern: The Forest Service should develop criteria for establishing new off-highway vehicle trails.

**Response:** Standards, goals, and objectives in the Revised Forest Plan, along with various Forest Service manuals and handbooks, include the management direction and guidance needed to provide for environmentally sustainable off-highway vehicle trail systems. Further detailed criteria are developed on a site-specific basis.

# **407.** Public Concern: The Forest Service should establish off-highway vehicle trails on inactive, private strip-mining property.

**Response:** The Forest Service has no authority for such developments on private lands. However, Forestwide goals provide for cooperation with the local community in economic development and such cooperative trail development could be a possibility.

## **408.** Public Concern: The Forest Service should create a broader spectrum of recreational opportunities desired by off-highway vehicle user groups with various levels of expertise.

**Response:** Unfortunately, we do not have the ability to provide all types of recreation experiences for all levels of users. Our goal is to provide a broad array of experiences within the capabilities of the agency and the land. However, additional opportunities could be provided on a case-by-case basis if financially sustainable and environmentally sound.

### **409.** Public Concern: The Forest Service should use a variety of connected roads and off-highway vehicle trails, which may, individually, be less than 15 miles long.

**Response:** We agree that individual trails need not be 15 miles in length, and that the overall riding experience, including connections to other systems is what's important. That is why we have emphasized riding "opportunities" rather than "trails."

#### 410. Public Concern: The Forest Service should close more off-highway vehicle trails than proposed.

**Response:** Chapter 2 of the Revised Forest Plan provides for evaluating trails on a regular basis and closing them where needed. We may, indeed, close more trails than estimated in the Revised Forest Plan.

### **411.** Public Concern: The Forest Service should use Symms Act Recreational Trail Program funds to build trails in southeastern Kentucky near London.

**Response:** This recommendation is outside the scope of the Revised Forest Plan. If there is a decision to construct trails in this area, this funding source will be considered and used as it has been for past projects.

#### 412. The Forest Service should use seasonal closings of some trails if significant ill effects occur.

**Response:** This is a good technique and will be considered on a trail-by-trail basis during implementation of the Revised Forest Plan.

#### **TRAILS (SPECIFIC)**

### **413.** Public Concern: The Forest Service should reopen the northern terminus of the Sheltowee Trace to off-highway vehicle travel.

**Response:** This option has previously been examined and the decision to close it was made based on environmental concerns, illegal off-highway vehicle use, and damage issues associated with private land.

### **414.** Public Concern: The Forest Service should not close the Livingston area to off-highway vehicle use.

**Response:** Most of the Livingston area used for off-highway vehicle (OHV) recreation is privately owned. The landowners have taken their own steps to close their lands to OHV use.

#### 415. Public Concern: The Forest Service should close the Lick Creek motorized trail.

**Response:** The Revised Forest Plan's Forestwide standards provide a system for evaluating trails on a regular basis. Upon evaluation, the Lick Creek area may be closed if needed.

### **416.** Public Concern: The Forest Service should better analyze the proposed Redbird Crest off-road vehicle route.

**Response:** The DEIS is a programmatic planning document to compare alternatives that can provide general direction for the future of the Daniel Boone National Forest. Site-specific concerns, such as the Redbird Crest OHV trail, are addressed at the project level rather than the forest plan level.

#### OFF-ROAD MOTORCYCLE USE

### **417.** Public Concern: The Forest Service should define, acknowledge, and provide for off-highway motorcycle (OHM) use on Forest land.

**Response:** Off-highway motorcycle use is included in the off-highway vehicle (OHV) definition, since motorcycles may be used on all OHV trails. Single-track opportunities may become available in the future; however, due to financial and land limitations, we are not able to provide all the recreation opportunities desired. It is most economical to provide trails that can be shared by a variety of motorized uses.

#### **ROCK CLIMBING**

### 418. Public Concern: The Forest Service should specify a minimum height above which the installation of fixed anchors does not require Forest Service authorization for route development.

**Response:** We believe that specifying a minimum height will not accomplish the intended objective of streamlining the authorization process because it does not mitigate the concerns related to route establishment.

### **419.** Public Concern: The Forest Service should be more specific (amount, location, size) regarding the removal of vegetation in Standard 1.C-REC-2.

**Response:** We believe the current wording is adequate because it allows for reasonable judgment to be made. An attempt to apply specifics for vegetation removal would presume that the environment at each site is unvarying, but that is not the case.

420. Public Concern: The Forest Service should approve access trails for an entire wall/area.

**Response:** The Revised Forest Plan standard at 1.C-REC-2 has been reworded, as suggested.

**421.** Public Concern: The Forest Service should inform the climbing public prior to closing climber trails, and give climbers the opportunity to rehabilitate or reroute trails.

**Response:** The public is notified prior to such actions. Volunteer assistance in such endeavors is appreciated and welcomed.

**422.** Public Concern: The Forest Service should specify a standard regarding authorization requirements for bouldering route development in non-cliff areas.

**Response:** Bouldering route development in non-cliffline communities is now addressed in Chapter 2 of the Revised Forest Plan with the standard at DB-REC-6.

**423.** Public Concern: The Forest Service should reconcile the difference between the desired future conditions stating that uses such as climbing are "generally allowed" and the standards for route approval relative to archeological resources.

**Response:** The phrase "generally allowed" does not mean that there will be no climbing restrictions. Nevertheless, Standard 1.C-REC-2 has been reworded and no longer specifically mentions archeological resources.

**424.** Public Concern: The Forest Service should allow climbers to add metal plates and soil at the base of rock climbing areas and use climbing areas until archaeological studies are conducted.

**Response:** We will provide for mitigation of resource damage, where possible, on a case-by-case basis since each situation presents its own unique challenges.

**425.** Public Concern: The Forest Service should incorporate all standards related to rock climbing into the Cliffline Community recreation standard I.C-REC-2.

**Response:** Except for standards specific to Wildernesses, nearly all standards related to rock climbing are within the Cliffline Community prescription area. A standard pertaining to bouldering was made Forestwide because bouldering could take place away from the areas falling into the Cliffline Community prescription area.

**426.** Public Concern: The Forest Service should better analyze various climbing issues.

**Response:** We believe that we have adequately addressed the significant items related to rock climbing and its associated trails. The Limits of Acceptable Change process to be conducted for the Red River Gorge, and additional monitoring, will provide additional analysis of climbing issues.

**427.** Public Concern: The Forest Service should develop sub-goals and objectives for rock climbing, as recommended.

**Response:** Goal 7.3 has been modified to include rock climbing.

### **428.** Public Concern: The Forest Service should educate and manage rock climbers to address serious adverse impacts in the Red River Gorge.

**Response:** The Forest Service and the rock climbing community are working together to address these concerns.

**429.** Public Concern: The Forest Service should develop a quota system to limit the number of people in the Red River Gorge to help reduce overuse from hiking and rock climbing.

**Response:** Quotas for use of public lands have not generally been well received by the public. However, we understand your concerns and will be working through the Limits of Acceptable Change process with the public to address overuse issues.

**430.** Public Concern: The Forest Service should survey proposed new climbing routes to protect natural resources.

**Response:** Proposals requiring authorization by the Forest Service will be subject to the environmental analysis requirements of the National Environmental Policy Act. Some level of survey will typically be part of this analysis process.

**431.** Public Concern: The Forest Service should survey existing climbing areas for sensitive resources and develop limits of acceptable change, but leave all existing routes open during this process.

**Response:** For the most part, management direction in the Revised Forest Plan is consistent with your survey suggestion, and we believe this direction will adequately protect resources and provide for climbing opportunities. However, it may be necessary to close some routes prior to completion of the Limits of Acceptable Change process is they are resulting in excessive damage to forest resources.

**432.** Public Concern: The Forest Service should modify language in the DEIS related to rock climbing to reflect that there is quality rock climbing outside the Red River Gorge, and also correct statements that exaggerate the status of rock climbing on the Forest.

**Response:** We realize that the Revised Forest Plan can be interpreted differently, depending on a reader's perspective. While we may not agree with the commenter's characterizations of certain text, we have made some modifications that we think better reflect the rock climbing situation.

**433.** Public Concern: The Forest Service should clearly define the term "fixed anchors," specify that slings or chocks are not permanent installations, and allow the use of safety bolt installation.

**Response:** The Revised Forest Plan has been reworded to address slings and chocks more accurately. If these are left in the Forest they still have similar adverse effects as bolts and are still considered "fixed." We will continue to manage our designated Wildernesses as specified in the Revised Forest Plan. Even though this may present too much of a challenge and risk for some, it is in keeping with Wilderness legislation.

**434.** Public Concern: The Forest Service should clarify the historical number of climbing routes existing in the Red River Gorge on page 3-243 of the DEIS.

**Response:** We realize that historical information regarding numbers of climbing routes is not easily verified and have reworded the FEIS to avoid references to specific numbers of routes.

### **435.** Public Concern: The Forest Service should provide the full spectrum of ROS experiences for the various climbing opportunities that climbers seek.

**Response:** The Cliffline Community prescription area, where climbing occurs, was developed for the unique natural ecosystem it provides and will continue to be managed for the ROS categories stated in the Revised Forest Plan.

**436.** Public Concern: The Forest Service should give district rangers the discretion to approve new climbing areas regardless of the presence of fixed anchors, constructed trails, removal of vegetation, or known archaeological sites.

**Response:** With appropriate analysis and public input, district rangers have the authority to make individual decisions. (A deviation from the Revised Forest Plan will require a project-specific amendment to the Revised Forest Plan.) The district rangers have provided input, review, and approval of the direction contained in the Revised Forest Plan and believe it provides the appropriate consistency of protection for cliffline resources.

**437.** Public Concern: The Forest Service should modify Standard 2.A-REC-5 to allow maintenance or replacement of fixed anchors within existing climbing areas in the Clifty Wilderness.

**Response:** We have considered the recommendation but we believe the current wording for this rock-climbing standard is appropriate for the Clifty Wilderness.

**438.** Public Concern: The Forest Service should not treat climbing, bouldering, and rappelling the same, because these are different activities.

**Response:** We believe the current standards for climbing, bouldering, and rappelling adequately reflect any differences. For example, DB-REC-6, regarding bouldering, was made a Forestwide standard because we recognize that the activity could take place outside the Cliffline Community prescription area.

**439.** Public Concern: The Forest Service should modify Standard 1.C-REC-2 to require authorization of climbing routes located within 300 feet of a known cave or rockshelter.

**Response:** We agree that caves and rock shelters require adequate protection, and such will occur with the site-specific analysis that will be part of any authorization of new climbing routes.

**440.** Public Concern: The Forest Service should develop a climbing management plan for managing rock climbing, bouldering, and rappelling.

**Response:** The National Forest Management Act requires that each national forest develop and maintain a single comprehensive management plan covering all forest resources and uses. The analysis and public involvement that will occur during the Limits of Acceptable Change process for the Red River Gorge (3.E-Objective 3.A.) may identify additional management direction pertaining to rock climbing, bouldering, rappelling, and other recreation activities, that should be amended into the Forest Plan.

**441.** Public Concern: The Forest Service should work with climbing groups to solve climbing related problems on the Daniel Boone National Forest.

**Response:** We will continue to work with climbing organizations to achieve the goals of quality climbing opportunities and protection of natural resources.

#### **MOUNTAIN BIKING**

442. Public Concern: The Forest Service should support mountain biking activities on Forest land.

**Response:** Goal 12.2 of the Revised Forest Plan provides management direction that is applicable to trails for mountain biking.

#### HIKING AND CAMPING

**443.** Public Concern: The Forest Service should manage the Sheltowee Trace as a long-distance hiking trail.

**Response:** We will be evaluating the future management of the Sheltowee National Recreation Trail as part of an overall evaluation of Forest trails

**444.** Public Concern: The Forest Service should add fire-building as a prohibited activity under Standard 1.C. REC-3.

**Response:** This activity has been added to the standard, as suggested.

**445.** Public Concern: The Forest Service should modify 1.G-Objective-1.D and prohibit camping in rare communities.

**Response:** Monitoring of rare communities will allow action to be taken as needed.

#### **HUNTING AND FISHING**

**446.** Public Concern: The Forest Service should promote hunting and fishing on Forest land but not allow use of ATVs to pursue or retrieve game.

**Response:** The Forest Service works with the Kentucky Department of Fish and Wildlife Resources to promote hunting and fishing. Kentucky law prohibits pursuit of game with motorized vehicles.

#### **EQUESTRIAN RECREATION**

**447.** Public Concern: The Forest Service should modify Standard 2.A-REC-1 and allow equestrian use in the Clifty and Beaver Creek wilderness areas.

**Response:** Horseback riding is allowed on designated trails in these two Wildernesses.

448. Public Concern: The Forest Service should open more Forest land to equestrian and other uses.

**Response:** Approximately 65 percent of the National Forest System trails on the Daniel Boone National Forest are open to horse use.

#### OTHER RECREATION

449. Public Concern: The Forest Service should identify and provide access to recreational caves.

**Response:** There are currently no designated recreational caves on the National Forest.

**450.** Public Concern: The Forest Service should clearly define and provide details regarding "recreation residence lot."

**Response:** A sub-section has been added to the Recreation section in Chapter 3 of the FEIS to explain and disclose the extent of this activity on the Daniel Boone National Forest.

**451.** Public Concern: The Forest Service should disclose how the effects of recreational mining will be determined.

**Response:** This activity has seldom, if ever, occurred on the Daniel Boone National Forest, because "recreational" minerals and/or the demand for such are so limited. However, a Forest Service directive for the Southern Region requires inclusion of Standard 1E-Min-3 in the Revised Forest Plan. Additional direction is provided in the Forest Service Minerals Handbook (2860). If recreational mining were proposed, a site-specific analysis would determine the effects and be used in the decision-making proces.

#### **DEVELOPED FACILITIES**

**452.** Public Concern: The Forest Service should specify a standard to install compost toilets, low-flow showerheads, and other conservation oriented appliances at developed recreation sites.

**Response:** This is a more site-specific decision than would be found in a programmatic document such as the Revised Forest Plan. Decisions to use conservation-oriented facilities would be made on a site-specific basis depending on the circumstance and facility development. Where feasible, we do attempt to provide conservation-oriented facilities.

**453.** Public Concern: The Forest Service should place emphasis on undeveloped and low-developed facilities in the Plan's goals and objectives.

**Response:** We do emphasize lesser-developed facilities. The more-developed facilities in Development Levels 4 and 5 are existing campgrounds and boat ramps constructed on Cave Run and Laurel River Lakes when these impoundments were created.

**454.** Public Concern: The Forest Service should not establish a level 2 campground with hook ups in the Red River Gorge.

**Response:** RV hook ups would not be included in a Level 2 campground. A Level 2 would probably have only primitive toilets, lantern posts, and fire rings for tent camping. In contrast, Koomer Ridge Campground is a Level 4 campground, which is much more developed than a Level 2.

455. Public Concern: The Forest Service should promote low-impact camping and picnic sites.

**Response:** We will continue to promote these facilities. Costly or poorly used facilities will be considered for closure.

#### Cave Run Lake Resort

**456.** Public Concern: The Forest Service should not develop a resort lodge or golf course at Cave Run Lake. A site-specific project such as this does not belong in a programmatic document such as the Revised Forest Plan.

**Response:** Disclosure of this "opportunity" in the Revised Forest Plan does not negate the need for site-specific analysis and public involvement if a corresponding development is proposed. There is no guarantee that a resort lodge will ever be built, nor has there been any decision as to what kinds of facilities would be built. The Revised Forest Plan makes no mention of a golf course. While this is a site-specific opportunity, it was already provided for in the 1985 Forest Plan and preliminary disclosure seemed to be prudent due to public interest in such a project.

#### FEE DEMONSTRATION PROJECT AND USER FEES

**457.** Public Concern: The Forest Service should rely more on donations and fund raising events and not rely on fees and permits.

**Response:** We have found that donated funds and labor do not come close to meeting the budget shortfalls we have experienced. Therefore, fees may be required at times.

#### RECREATION EDUCATION

**458.** Public Concern: The Forest Service should install trash cans at trailheads and popular camping areas, and educate Forest users on how to properly clean-up after their recreational activities.

**Response:** We continually work on this problem through education and law enforcement. The PRIDE Program, which is continuing to experience success, is helping to change the attitude of many who visit and live near the National Forest. Although there are many trash receptacles at most developed sites, most of the National Forest operates on a "Pack it in – Pack it out" basis. Additional trash collection is limited by the recreation budget.

### SCENERY AND VISUAL RESOURCES (AESTHETICS)

**459.** Public Concern: The Forest Service should better analyze aesthetic protection.

**Response:** While we do not get into specifics of scenery management in the Revised Forest Plan, we will use existing Forest Service guidance to manage the National Forest's scenery. The Forest Service Handbook concerning scenery management provides appropriate guidance to meet visual quality needs.

### **Special Designations**

#### **ROADLESS AREAS AND WILDERNESS**

**460.** Public Concern: The Forest Service should place less emphasis on roadless and wilderness areas and emphasize access development that will enhance forest health.

**Response:** We believe the Revised Forest Plan strikes an appropriate balance between the values associated with forest that is less influenced by human activity and the need to manage the forest so that the other conditions and uses are sustained. The preferred alternative proposes no new wilderness designations but retains the existing roadless character of the area (3E-Goal-7). The Record of Decision includes the rationale for the Selected Alternative, including why the Regional Forester believes the balance of management emphases it reflects is most appropriate.

**461.** Public Concern: The Forest Service should recommend additional Forest land as wilderness, including the Wolfpen Area as a wilderness study area and recommend its addition to the Clifty Wilderness Area.

**Response:** While the Wolfpen area has many positive characteristics when considering it as a Wilderness Study Area, it also has some heavy dispersed use in various places that would make it very difficult to properly manage and maintain as a wilderness. Thus, we believes its current management as a semi-primitive non-motorized area best serves the public and continues to allow the recreational uses currently found there. We do not believe that comparison with other national forests, which have different lands and uses, is necessarily a criterion that we should use to determine how much wilderness the Daniel Boone National Forest can, or should, provide.

**462.** Public Concern: The Forest Service should assess priorities for desired lands to be managed for natural (wilderness-like) features and measure success toward such goals.

**Response:** We believe that a reasonable balance has been achieved in the diversity of land uses within the Forest, including wilderness-like lands.

**463.** Public Concern: The Forest Service should analyze wilderness demand and supply, independently and in comparison.

**Response:** Please see Wilderness supply and demand analysis in the Assessment of the Management Situation and section on Wilderness (Existing and Proposed) in the FEIS.

**464.** Public Concern: The Forest Service should designate additional areas as roadless, as recommended, and provide protection.

**Response:** We respectfully disagree with several of your assumptions and characterizations of the roadless and wilderness issues and believe that we have adequately analyzed these resources and have provided a balance of land allocations, including those you mention.

**465.** Public Concern: The Forest Service should remove all culverts and other structures associated with roads that will be closed in the Clifty and Beaver Creek Wilderness.

**Response:** Any removal of culverts and similar structures should be based on site-specific project level analysis not the programmatic analysis of this plan. This is most important when aquatic communities and federally listed species are involved. An objective of the Riparian Corridor Prescription Area is to inventory these types of aquatic barriers on a forestwide basis.

**466.** Public Concern: The Forest Service should modify Prescription Area 2.A, Clifty Wilderness, and Prescription Area 2.B, Beaver Creek Wilderness, as recommended.

**Response:** Changes have been made where appropriate. Some standards are appropriate for this Wilderness and best protect its Wilderness values.

**467.** Public Concern: The Forest Service should add portions of the Beaver Creek Wildlife Management Area to the Beaver Creek Wilderness.

**Response:** The analysis of potential wilderness study areas did not find these areas to be suitable.

**468.** Public Concern: The Forest Service should establish a wilderness area on the Redbird District west of Buckhorn Lake.

**Response:** There is insufficient National Forest System land west of Buckhorn Lake to form a wilderness area.

#### HERITAGE AND CULTURAL RESOURCE MANAGEMENT

**469.** Public Concern: The Forest Service should incorporate more proactive measures towards protecting archaeological resources and should implement the Department of Interior's standards for archeology and historic preservation, and all appropriate laws, regulation, and guidance.

**Response:** Existing laws and regulation provide adequate protection of archeological resources and will be followed. Additional proactive measures will occur based upon financing and available resources.

**470.** Public Concern: The Forest Service should enhance the public education programs for heritage resources and provide guidance to forest users.

**Response:** We agree, and will do so as funding permits.

#### WILD AND SCENIC RIVERS

**471.** Public Concern: The Forest Service should support wild and scenic river designation for several rivers, as recommended.

**Response:** That is the intent of the plan. We appreciate your support.

**472.** Public Concern: The Forest Service should conduct better analysis and disclose results regarding wild and scenic river designation on the Forest.

**Response:** Please see Appendix D of the EIS. Goals, objectives, and standards in the Riparian Corridor prescription area are designed to maintain and improve water quality across the Daniel Boone National Forest. Forestwide direction also strives to improve water quality. In addition the Daniel Boone National Forest also is involved in the Kentucky Watershed Management Framework, which works on water quality issues.

**473.** Public Concern: The Forest Service should provide access to the Rock Creek and Marsh Creek wild and scenic river segments.

**Response:** There is some existing access.

474. Public Concern: The Forest Service should modify Prescription Area 3.C.1, Red River Wild and Scenic River; 3.C.2, Proposed Wild and Scenic River: Marsh Creek Wild River Segment; 3.C.4, Proposed Wild and Scenic Rivers: Cumberland/War Fork/Rockcastle Segments; 3.C.5, Proposed Wild and Scenic River: Rock Creek and Marsh Creek Wild River Segments.

**Response:** We believe the Plan provides as much protection as possible while protecting legal rights of private owners.

**475.** Public Concern: The Forest Service should specify that the Marsh Creek Proposed Wild River Segment is unsuitable for timber production, as recommended.

**Response:** This description has been changed and now matches the other wild and scenic river prescription areas.

**476.** Public Concern: The Forest Service should coordinate with Kentucky Natural Resources and Environment Protection Cabinet on the proposed Marsh Creek Wild River segment.

**Response:** This segment is not part of the state's wild and scenic river system.

#### RESEARCH NATURAL AREAS AND NATURAL AREAS

**477.** Public Concern: The Forest Service should designate Tight Hollow as a Research Natural Area or as designated old-growth.

**Response:** If not selected as an RNA, the area will be moved into the Red River Gorge Geological Area where it will receive appropriate management (see standard 1A-Land).

**478.** Public Concern: The Forest Service should avoid thinning and planting within most designated natural areas.

**Response**: Site-specific project planning based on Plan direction will determine if these treatments are appropriate to achieve the desired future conditions for the particular prescription area.

**479.** Public Concern: The Forest Service should establish at least one or more research natural area in each management area or at least one research natural area for each community type. The Forest Service should increase the scale of research natural areas to allow for research, as recommended to support large samples, comparative data, and species viability.

**Response:** Research Natural Areas are established in cooperation with Forest Service research stations. Need for RNAs is based on representation of forest types in RNAs throughout the southeast as opposed to just Kentucky. If there is no need for more of a certain type, additional areas are not established.

**480.** Public Concern: The Forest Service should apply the same management to all proposed research natural areas.

**Response:** Management permitted within a Research Natural Area (RNA) is determined by the management plan specific to the RNA and developed by Forest Service research stations.

### **481.** Public Concern: The Forest Service should clarify whether fire will be used in the research natural areas.

**Response:** The management plan for Rock Creek, an existing Research Natural Area (RNA), does not permit prescribed fire. Tight Hollow and Right Fork of Elisha Creek are proposed RNAs without management plans. If the proposed areas are accepted, the Southern Research Station will write a management plan for each area that could include prescribed fire.

**482.** Public Concern: The Forest Service should establish large areas with little or no prescribed fire in the Rockcastle River, Redbird River, and Licking River watersheds.

**Response:** The use of prescribed fire in a particular area will be determined by site-specific analysis in reference to Plan direction for a particular area.

**483.** Public Concern: The Forest Service should map and better summarize, simplify, and combine displays and analysis of locations of wilderness-like or presettlement-like natural areas. The Forest Service should emphasize native plants and animals in planned natural areas, and distinguish between wilderness-like management and presettlement-like management.

**Response:** The terms "wilderness-like" or "presettlement-like" and "natural areas" have not been defined. However, prescription area desired future conditions should give each reader a feeling as to whether the area meets their personal definition of such terms. Fifth-level watershed inventory and analysis will provide data that can be used to locate areas of interest at a more easily understood scale. The Plan promotes native species, but also allows for desired non-native species as directed by planning regulations.

#### OTHER SPECIAL DESIGNATIONS

**484.** Public Concern: The Forest Service should modify Prescription Area 3.F, Natural Arch Scenic Area; and 3.E, Red River Gorge Geological Area.

**Response:** The proposed direction (Goals, Objectives and Standards) is appropriate as stated in the Plan and provides appropriate management, including protection, to achieve the desired future condition for these areas. Other specific measures will be implemented based on site-specific project level analysis.

**485.** Public Concern: The Forest Service should protect the research plot on the 39-acre Reece Tract in the White Oak area.

**Response:** Designation of lands specifically for research purposes was not deemed to be necessary at the programmatic level the Revised Forest Plan. However, there are several on-going research projects on the Forest that will be tracked and encouraged as long as such research is of interest. Each is tracked in our CISC database as "Special Study Area."

### **Lands and Special Uses**

#### LAND ACQUISITION AND EXCHANGE

**486.** Public Concern: The Forest Service should establish specific forestwide goals, objectives, and standards related to the sitting and approval of future special uses. The Forest Service should implement new goals and standards related to special use permits, as recommended.

**Response:** The Plan, along with Forest Service handbooks and manuals, provide adequate guidance for issuing special uses and provide for the recommended goals and standards. Regulations -- such as 36 CFR 251 Subpart B – Special Uses, FSM 2700, and FSH 2709.11 -- address this concern. Also see Forestwide goals and standards, as well as goals, objectives and standards in individual prescription areas.

**487.** Public Concern: The Forest Service should consolidate scattered parcels of Forest land, and expand the size of the Forest. The Forest Service should allocate more funds for land acquisition.

**Response:** Chapter 2 of the Plan, along with Forest Service handbooks and manuals, provide guidance for land acquisition. Congress and the market value of land determine the acquisition program every year. Priorities are re-examined as land becomes available for acquisition.

**488.** Public Concern: The Forest Service should emphasize ecological needs over land consolidation and acquire lands that increase and protect the biodiversity of the forest.

**Response:** Ecological needs are one of the many considerations in land acquisition and exchange. Chapter 2 of the Plan, along with Forest Service handbooks and manuals, provide guidance for land acquisition. Congressional appropriations and the market value of land determine the annual acquisition program. Priorities are re-examined as land becomes available for acquisition.

**489.** Public Concern: The Forest Service should modify standard DB-LAND-1 to clearly define the term "inventory," specify a time limit for the completion of inventories of new parcels, and modify all Plan standards to specify time limits.

**Response:** DB-land-1 has been rewritten for clarification. If a time frame is not included, it is assumed that the action will occur sometime during the 10-15 year plan period. Timing will be partially based upon each site-specific situation.

**490.** Public Concern: The Forest Service should ensure that any land exchanges are advantageous to the federal government.

**Response:** Your concern is addressed in 36 CFR 254, Subpart A – Land Exchanges, and in FSH 5409.13, Chapter 30 – Land Exchanges.

**491.** Public Concern: The Forest Service should use land acquisition to: 1) acquire coal lands adjacent to Pine Mountain, 2) add high-elevation acreage in the mixed mesophytic forest association, 3) protect cave habitats, protect or enhance bat habitat and populations of bat species, 4) acquire climbing areas located on private lands, and 5) fulfill objectives for species for which there is no suitable or restorable habitat on Forest land, but such habitat exists within the proclamation boundary.

**Response:** Chapters 2 and 3 of the Plan, along with Forest Service handbooks and manuals, provide guidance for land acquisition.

**492.** Public Concern: The Forest Service should specify how much land would be purchased, how it will be managed, and how these purchases would affect aquatic resources.

**Response:** Chapters 2 and 3 of the Plan, along with Forest Service handbooks and manuals, provide guidance for land acquisition and how the lands will be managed. Congressional appropriations and the market value of land determine the acquisition program every year. Priorities are re-examined as land becomes available for acquisition.

**493.** Public Concern: The Forest Service should purchase development rights from adjoining landowners.

**Response:** Purchase of development rights on adjoining property has not been considered on the Daniel Boone National Forest. The need, to this point, has not arisen. The plan is silent on this possibility but does not eliminate this option.

**494.** Public Concern: The Forest Service should suspend land exchanges.

**Response:** Exchange of land is authorized by 36 CFR 254 Subpart A – Land Exchanges. Land exchanges have a valid purpose. This is explained in the EIS (Chapter 3, Land Adjustments and Uses, Effects Common to all Alternatives).

495. Public Concern: The Forest Service should not exchange land with [a specific company].

**Response:** Specific land transactions are beyond the scope of this programmatic planning document. Comments are welcome for each proposed exchange project, however.

496. Public Concern: The Forest Service should not sell public land.

**Response:** Such a policy is out of the scope of a Forest plan. However, National Forest System lands are seldom sold, but they may be exchanged.

**497.** Public Concern: The Forest Service should not allow easy transfer of land for uses that are not compatible with agency goals, management areas, prescription areas, and significant amendments.

**Response:** Land exchanges provide a net improvement in the Forest's ability to achieve desired future conditions. Exchange for consolidation often offers the best possible means to attain these desired future conditions, given limited resources.

#### COMMUNICATION SITES AND UTILITY CORRIDORS

**498.** Public Concern: The Forest Service should revise Standard 5.C-LAND-1, as recommended, to restrict utilities and establish monitoring.

**Response:** The wording has to remain as is because we cannot prevent recovery of reserved and outstanding mineral rights whereas we can mitigate the impact with protective measures.

**499.** Public Concern: The Forest Service should purchase an inholding or other area within the forest any time a special use permit is issued for utilities or roads.

**Response:** It is beyond the scope of this Forest programmatic plan. There is no legal authority to make this requirement.

**500.** Public Concern: The Forest Service should implement new goals, objectives, and standards, as recommended, for the use of communication sites, utility corridors, water systems, maintenance of rights-of-way, and the collections of products and species.

**Response:** The Plan, along with Forest Service handbooks and manuals provide guidance for special uses, and special product permits. See Forestwide Goals objectives and standards and lands standards under individual prescriptions areas. The process for review and approval of special uses is contained in 36 CFR 251, Subpart B - Special Uses and FSH 2709.11. Additional guidelines are in the 1900 manual. There is no need to repeat this in the Revised Forest Plan. Communication Towers can only be constructed on those sites designated in the prescription area as Communication Sites. To construct towers outside these sites will require a plan amendment.

**501.** Public Concern: The Forest Service should require that transmission towers contain low intensity amber lights every 4 feet of height along the tower.

**Response:** We believe that the Goals, Objectives and Standards are appropriate as stated in the Plan. Other specific measures will be implemented based on a site-specific project level analysis. Prescription Area 5A - Communication Sites, addresses migratory bird mortality and encourages implementation of mitigating measures.

**502.** Public Concern: The Forest Service should examine alternatives that limit the construction of communication towers.

**Response:** The Plan, along with Forest Service handbooks and manuals limit communication tower location.

**503.** Public Concern: The Forest Service should ensure that access roads remain available for maintenance of transmission lines.

**Response:** This is best dealt with on a site-specific basis in the individual permits. The issuance of new Special Use Permits will include access & maintenance provisions.

**504.** Public Concern: The Forest Service should analyze and disclose the effects of power transmission lines and site-related electrical equipment. The Forest Service should analyze and disclose the effects of pipeline corridors, mitigation measures, and abandonment and removal of pipelines.

**Response:** An interdisciplinary science-based analysis at the appropriate scale will be used to inform planners and decision makers of environmental effects at a site-specific analysis in the form of an EA/EIS that will be done for each special use proposal that becomes an application.

### **Natural Resources Management**

### **NATURAL RESOURCES MANAGEMENT (GENERAL)**

**505.** Public Concern: The Forest Service should not allow timber harvest, mining, drilling, prescribed fires, herbicides and pesticides, off-highway vehicles, roads, pipelines, or other forest incursions.

**Response:** The USDA Forest Service is mandated by Congress to manage the national forests for multiple uses. The national forests have a mission different from the national parks.

**506.** Public Concern: The Forest Service should not conduct timber harvest and road building in cave watersheds. The proposed 200-foot buffer zone will not provide adequate protection.

**Response:** A site-specific analysis will determine if harvesting and road building can occur without impacting the cave resource.

**507.** Public Concern: The Forest Service should define differences between low, moderately low, and moderate impacts for all resources.

**Response:** The Watershed Health Index is a relatively large-scale coarse filter developed to evaluate alternatives in forest plans and to establish priority work at the strategic planning scale. Therefore, further detailed analyses of the watershed will be conducted at the project level.

**508.** Public Concern: The Forest Service should analyze the effects of timber harvest, mining, and development on surrounding private land.

**Response:** Significant cumulative effects are addressed in the EIS under the resource affected.

**509.** Public Concern: The Forest Service should identify what vegetation management practices will be conducted on specific vegetation types as required by 36 CFR 219.15.

**Response:** This information is available in Appendix H of the Plan.

**510.** Public Concern: The Forest Service should consider effects on all lands within the Forest's proclamation boundary when making conservation decisions.

**Response:** Significant effects are addressed in the EIS under the resource or program affected. The analysis area is often contained within the proclamation boundary, but may vary by resource. The analysis areas are identified in the Environmental Effects section for each resource.

**511.** Public Concern: The Forest Service should prosecute all staff that falsify information or knowingly aid in the distribution of false materials regarding timber cuts, habitat, etc.

**Response:** This is beyond the scope of the plan. However, misconduct is taken seriously and will be dealt with according to established disciplinary processes.

#### RESTORATION

**512.** Public Concern: The Forest Service should conduct restoration.

**Response:** Restoration is a part of the plan.

**513.** Public Concern: The Forest Service should not conduct restoration at the expense of forest health.

**Response:** Since these two concepts are complementary, there is no a conflict.

**514.** Public Concern: The Forest Service should clearly define conditions that require timber harvest for restoration, and establish specific standards for restoration timber sales, as recommended.

**Response:** To determine the purpose and need for each project, both Forestwide and prescription area desired future conditions (DFC) will be compared to a current condition. The environmental documentation for each project should explain how the project would help achieve the DFC. The Allowable Sale Quantity (ASQ) is a figure that that must be disclosed as mandated by the National Forest Management Act to assure a non-declining flow of timber. The term "timber target" is not used in the Revised Forest Plan as a planning objective.

**515.** Public Concern: The Forest Service should protect and restore large, interior blocks of native forest land.

**Response:** The need for large blocks of interior forest land was considered when evaluating the needs of the species found on the Daniel Boone National Forest.

#### **GUIDING MANAGEMENT PHILOSOPHY**

**516.** Public Concern: The Forest Service should allow nature to take its course without human intervention.

**Response:** One of the alternatives originally considered was alternative B, which matches your request. However it was rejected for various (including legal) reasons (see EIS, chapter 2, Alternatives considered but eliminated). A mostly hands-off approach was considered in greater detail in Alternative B-1. Please see the comparative analysis in the EIS.

**517.** Public Concern: The Forest Service should focus management on environmental protection and ecotourism.

**Response:** Plan prescriptions were designed to provide and protect habitat and connections among habitats for both common and rare species. Site-specific analysis can best address the elimination of invasive plant and animal species.

**518.** Public Concern: The Forest Service should manage the forest for biodiversity, habitat and species conservation and restoration, scenic beauty, water, air, soil quality, and passive recreation.

Response: We agree.

**519.** Public Concern: The Forest Service should state that the goal of the Plan is to promote healthy and natural forest processes and growth.

**Response:** We agree. That is the intent of the Forestwide goals.

**520.** Public Concern: The Forest Service should manage the forest to be environmentally sustainable.

**Response:** We believe the overall direction of the Revised Forest Plan will result in a diverse and sustainable forest, and provide long-term ecological, economic, and social benefits consistent with maintaining ecological health. The ecosystem management approach applied is fundamental to reaching these goals. In addition, the Plan provides the necessary flexibility required to address new findings and ensure application of the best available science.

### **521.** Public Concern: The Forest Service should state that the production of timber was and is a primary mission of the national forest system.

Response: The mission of the national forests has evolved through the Organic Act of 1897, Multiple-use Sustained Yield Act of 1960, the regulations that implement the National Forest Management Act of 1976, and current Ecosystem Management policy. Although timber will be produced under the Revised Forest Plan, timber production will not be the primary purpose of the Daniel Boone National Forest during this planning period (Please see page 1-1 of the Plan.)

**522.** Public Concern: The Forest Service should make ecosystem management a major priority. The Forest Service should use adaptive management and ecosystem management that focuses on outcomes.

**Response:** The Revised Forest Plan is based on described desired future conditions projected to achieve landscape conditions that can sustain ecological processes and function. The focus of management actions is to obtain desired results, or outcomes, not produce outputs. Chapter 5 of the Plan discusses adaptive management.

#### MONITORING AND EVALUATION

**523.** Public Concern: The Forest Service should implement a systemized, regularly conducted monitoring program with information communicated to the public.

**Response:** This is provided in Chapter 5 of the Plan, and monitoring task sheets. Monitoring results as well as other annual accomplishments are made available to the public through our year-end "Monitoring and Evaluation Report."

**524.** Public Concern: The Forest Service should have monitoring and field data peer-reviewed.

**Response:** The desirability of having data collection and monitoring peer reviewed will depend on the scope of the project. Much of the monitoring activities on the Forest will occur cooperatively with other agencies and professional interests or in conjunction with efforts of the academic community.

#### NON-TIMBER FOREST PRODUCTS

**525.** Public Concern: The Forest Service should not issue permits for collecting in rare communities.

**Response:** Please see Final EIS, Forest-wide direction and the Rare Community prescription for changes that address this concern.

### **TIMBER RESOURCE MANAGEMENT (GENERAL)**

**526.** The Forest Service should manage the Daniel Boone National Forest to be a guiding light for high quality hardwood timber production in the region.

**Response:** The Forest is concerned about quality hardwood production. Additional clarification concerning timber quality has been added under Goal 8. However where timber production for profit is typically the motive for private and industrial forest landowners, this is not a goal for the Daniel Boone's Revised Forest Plan.

### **527.** Public Concern: The Forest Service should conduct timber harvest to benefit forest health, wildlife, and local economies.

Response: We agree. Thank you for your support.

### **528.** Public Concern: The Forest Service should conduct more timber harvest to enhance recreation through additional access (open and gated roads).

**Response:** When a system road is required for timber harvest, recreation access is one of many considerations during project planning and road design.

### **529.** Public Concern: The Forest Service should clearly define what is meant by harvesting timber and non-timber forest products on a sustainable basis.

**Response**: The terms "timber products" and "non-timber forest product" are clearly defined in the glossary. We have also clearly defined the concepts of sustainability and sustained yield in the glossary. Determination of the sustainability of activities on lands outside of the national forest system is out of the scope of management of the Daniel Boone National Forest.

### **530.** Public Concern: The Forest Service should state in the Forestwide desired future conditions that timber harvest will be used as a management tool.

**Response**: The Forestwide DFC in Chapter 2 of the Plan has been reworded as suggested.

#### **531.** Public Concern: The Forest Service should allow the Forest to rest for many decades.

**Response:** Forests never really rest – death, regeneration, and growth occur throughout the seasons of each year. We believe that we have planned a reasonable and needed amount of human disturbance.

### **532.** Public Concern: The Forest Service should develop a section within the Plan devoted to timber and timber management.

**Response**: Appendix H of the Revised Forest Plan briefly describes science-based silvicultural systems, techniques, and methods that may be used on the Forest. A more detailed explanation of forestry practice is explained in greater detail in the many available texts and papers that have been published over the years. As indicated by the glossary definition, silviculture is applied in order to achieve the objectives of management. Objectives of forest management normally vary by ownership; therefore, there is not one particular way in which timber should be managed, or silviculture applied.

### **533.** Pubic Concern: The Forest Service should have research-based justification for removing land from the areas where timber harvest will occur.

**Response**: One of the decisions a forest plan must make is the allocation of lands as "suitable" or "unsuitable" for timber production. We are not required to have lands solely designated for timber production. Most of the land-use allocations and desired future conditions were based on wildlife science and the science of ecology, although some land-use decisions are necessarily based on policy as well as current social interests. In the proposed Revised Forest Plan, we are considering timber harvest as a tool to achieve non-timber objectives.

### **534.** Public Concern: The Plan should clearly show where timber harvesting can and should be used as a tool, how it will be scheduled, the type of products that will be targeted and methods used.

**Response**: The Revised Forest Plan has been changed to clearly show where timber harvesting may be used as a management tool (see Setting for each Prescription Area). Site-specific project analysis will determine where and how this tool will be used. An estimate of volume that might be produced by the timber program can be found in Appendix C of the Plan. No specific type of product is targeted in the Plan, since acres of various habitats provide a better "target" (or objective) within the preferred alternative. The desired future condition of the sale area along with market demand will influence the types of roundwood products that will be offered for sale at that time (Goal 8.1). Vegetation management methods (practices) available for use are disclosed in Appendix H of the Plan.

### **535.** Public Concern: The Forest Service should state that timber management is synonymous with vegetation management.

**Response:** The terms "timber management" and "vegetation management" are not synonymous (Please see glossary definitions).

### **536.** Public Concern: The Forest Service should use timber harvest sparingly to improve habitat diversity.

**Response**: Regardless of how "sparingly" is defined, our analysis indicates that the Plan prescribes an appropriate amount of timber harvest to achieve a balance of planned goals, including the improvement of habitat diversity.

### **537.** The Forest Service should limit logging to storm damaged trees and very limited timber harvests for research purposes only.

**Response:** This was not an alternative considered. However, such an alternative would appear to be similar to Alternative B or B-1, which were not preferred for various reasons.

#### Suitable/Unsuitable for Timber Production

**538.** Public Concern: The Forest Service should present information regarding timber harvest in a reader-friendly fashion that does not mislead the public. The Forest Service should clearly define the terms "timber production" and "timber harvest," and "suitable for timber production" as recommended.

**Response:** We believe the terms "timber harvest" and "timber production" have been adequately defined in the Glossary of both the Plan and the EIS. However, clarification of the phrases related to suitability for timber production is made in the Setting section of all prescription areas and throughout the text, as well as in the Glossary.

### **539.** Public Concern: The Forest Service should increase the amount of land designated as suitable for timber harvest.

**Response:** As indicated in Appendix H of the Plan, the array of habitat management (vegetation management) techniques will be available for use, regardless of suitability classification. However, the desired future condition (DFC) of a prescription area may narrow the need for many techniques. Where a prescription area is classified as unsuitable, the DFC indicates that there was no need for regularly scheduled timber harvest.

# **540.** Public Concern: The Forest Service should demonstrate the need to eliminate commercial timber harvest near significant bat caves and classify such lands as suitable with restrictions on harvest.

**Response:** The cutting of trees, whether or not they are sold as timber products, can occur within this prescription area if the purpose and need for the action is based on habitat enhancement for associated proposed, endangered, threatened, and sensitive species.

### **541.** Public Concern: The Forest Service should specify that portions of riparian areas are suitable for timber harvest.

**Response:** This Riparian Corridor Prescription Area was designed to address the needs of riparian-dependent species, as well as for soil, water, and aquatic species needs. The Coweeta and Fernow laboratory studies that you cite focused on water quality only, not riparian habitat. We concluded that a scheduled timber harvest is not needed to meet the desired future condition, except for a small amount of uneven-aged structure (1E-Objective-2.C.). There is very little upland portion in this prescription area, so different management of any narrow strips of transition along its borders would be impractical. There is provision in the Setting of the Riparian Corridor Prescription Area to vary the width of an area based on site-specific investigation.

### **542.** Public Concern: The Forest Service should not designate rare communities as unsuitable for timber harvest.

**Response:** A scheduled harvest would not be necessary in these areas to achieve the desired future condition. However, occasional vegetation management may be necessary on a site-specific basis.

### **543.** Public Concern: The number of acres set aside as unsuitable for timber production will threaten forest health.

**Response:** Forestwide Goal 2 gives reason for treatment in any stand that is not meeting the Glossary definition of forest health. Vegetation management may occur to help achieve the desired future condition in most prescription areas.

## **544.** Public Concern: The Forest Service should reduce the amount of land designated as suitable for timber harvest because of the presence of steep terrain and sensitive riparian areas and communities.

**Response:** The Revised Forest Plan has several provisions for the management of steep terrain, sensitive riparian areas, and rare communities. The Daniel Boone National Forest, located mostly on the Cumberland Plateau, has different terrain than other national forests in the South (as well as other differences). Therefore, it has different management prescriptions and associated suitability classifications.

### **545.** Public Concern: The Forest Service should designate buffer zones and transitional zones around areas designated as unsuitable for timber harvest.

**Response:** The locations of the boundaries for the prescription areas have been designed to promote and/or maintain the values (or desired future conditions) within each of the adjacent areas. Specific transition zone management would complicate implementation.

# **546.** Public Concern: The Forest Service should explain why the alternatives do not vary in the amount of land classified as suitable for timber production and provide information as requested.

**Response:** There is a substantial difference in the alternatives in the amount of land classified as suitable for timber production, except between alternatives C, C-1, and D (see FEIS Ch.3 Timber Products). These alternatives vary in the amount of recreation emphasis, not significantly in timber production.

**547.** Public Concern: What percentage of total regional forested land is made up of national forest timber-producing acres? What percentage of total forested land in the state do national forest system acres represent? This information is important for understanding the relative importance of these lands across the landscape.

**Response:** This information is available in the FEIS (Chapter 2, Fragmentation) for the area within the Proclamation Boundary as well as for the Cumberland Plateau. A statewide analysis of forestland is out of the scope of this Plan but is available from the Forest Inventory and Analysis (FIA) at http://srsfia2.fs.fed.us/.

**548.** Public Concern: How can ecological restoration in the preferred alternative lead to a sustainable supply of wood products? Once ecosystems have been restored, why is timbering necessary when it is only a byproduct of restoration activities?

**Response:** The premise is for timber (managed on a sustainable basis) to be a by-product of the maintenance of "a variety of life" (Goal 1, Plan, Chapter 2). Maintenance of such variety begins with the maintenance of a variety of forest structure and composition, including the reduction of tree density (Objective 2.1.A), and may include restoration of conditions that once occurred (1K-Goal-2) which were once maintained by fire and grazing (FEIS, Chapter 3, Fire).

#### FOREST STRUCTURE AND COMPOSITION

**549.** Public Concern: The Forest Service should create a complex forest structure with an appropriate mix of complex canopy and understory structure for the Cerulean Warbler.

**Response:** We have provided for cerulean warbler habitat not only through the mix of forest condition direction in the Plan, but also specifically Objective 1.1.B. found in Chapter 2 of the Plan.

**550.** Public Concern: The Forest Service should provide a broad diversity of age class distributions to benefit forest health.

**Response:** We have planned timber harvest in a large portion of the Forest to maintain forest health (see Goal 2) and a range of age classes will develop as a result of management for early succession (1K-Objective-1.A). A balanced broad diversity of age-classes would include those age-classes that tree species are capable of reaching. We believe the guidance in the proposed plan will achieve that diversity.

**551.** Public Concern: The Forest Service should develop and maintain a mosaic of forest succession through more "suitable" land designations.

**Response:** A mosaic of forest succession will be maintained on much of the forest, and we believe the balance between suitable and unsuitable timberland is reasonable based on the desired future conditions for each prescription area.

**552.** Public Concern: The Forest Service should move toward an older forest condition, while managing for openings and early successional forest.

**Response:** This is what is planned. Thank you for your support.

### **553.** Public Concern: The Forest Service should not manipulate species or replace hardwood forests with pine plantations, nor create pine plantations.

**Response:** When tree species are planted outside of their natural range, the results are often failures; however, in general, pine planting in the southeastern United States has been a huge success. Both pine and hardwoods are viable on portions of Daniel Boone National Forest lands and have a 2,000 to 3,000 year history of being present (see EIS Viability Section). We intend to manage pine on some areas to provide an important habitat component for many rare species.

#### **554.** Public Concern: The Forest Service should restore yellow-pine dominated forests.

**Response:** We are planning to do this on some areas. Thank you for your support.

### **555.** Public Concern: The Forest Service should not plant yellow pine or scrub pine because the threat of beetles give them a poor chance of survival.

**Response:** Pine restoration is planned for 822 acres per year (see Appendix C of the Plan). This slow recovery should result in a more balanced age-class distribution within the pine types than occurred in the past. In addition, a higher ratio of hardwood to pine is expected in stands planted to pine. Less dense stands are also planned (Objective 2.1.A). These factors should discourage the southern pine beetle. "Scrub pine" or Virginia pine will rarely (if ever) be planted except for mine reclamation.

#### **556.** Public Concern: The Forest Service should replace cut trees with large healthy trees.

**Response:** The desired condition is for large healthy trees to grow back where their predecessors once were.

# **557.** Public Concern: The Forest Service should replant harvested species with a similar number and type of species that was harvested, within one year.

**Response:** Whether trees are planted following a harvest is determined by, among other things, the desired future condition for the area, the available advanced regeneration, and the physical conditions. Artificial regeneration in the next decade will be mostly pine restoration on sites formerly occupied by pine. We are required by National Forest Management Act to certify adequate regeneration within five years of harvest.

# **558.** Public Concern: The Forest Service should require replanting of new trees with equal ingrowth and 1.5 times the economic value of those removed.

**Response:** The majority of the regeneration that is planned will occur naturally. The small amount of planting (artificial regeneration) that is planned will be for pine ecosystem restoration, not economic value.

### **559.** Public Concern: The Forest Service should establish reasonable rotation ages for the different timber types to prevent the loss of red oak and pine.

**Response:** The regeneration objective in the Habitat Diversity Emphasis Prescription Area has been clarified (see 1K-Objective-1.A). The objective indicates that rotations shorter than 200 years will probably be needed for stands in poor condition (excessive mortality, short-lived species, etc.)

### **560.** Public Concern: Long rotation ages are not appropriate because younger, more diversified stands survive disturbance events better than older stands.

**Response:** Because the Forest contains more "older" stands than "younger" stands, one would expect to see more damage in older stands. We agree that the longer a stand exists, the more likely it is to suffer heavy damage from a stochastic event.

#### **561.** Public Concern: The need for old-growth can be met by special areas.

**Response:** Not a lot is known about old-growth forests in the east. Old-growth forests take long periods to develop – longer than the age of the oldest trees. Most old stands in the 1.K-Habitat Diversity Prescription Area will not have the desired old-growth characteristics within the rotations expected. We believe that the 1.I-Designated Old-growth Prescription Area is needed along with the "Special Areas" to develop an adequate range of old-growth types.

# **562.** Public Concern: The Forest Service should modify 1.K-Objective-1.A to specify that at least five percent of the area, excepting natural catastrophic events, will be maintained in a variety of vegetation.

**Response:** Please note that this objective says "maintain five to six percent in each fifth level watershed." Where watersheds already have well over six percent in the 0-10 age class due to natural catastrophic events, additional early succession would not be needed until the next decade. Some of these areas could be restored to pine-dominated forest types. While there may not be timber harvest (or salvage) associated with this work, there will be active forest management.

# **563.** Public Concern: The Forest Service should ensure accuracy in the number of acres and percentages reported for habitat composition and structure.

**Response:** The acres of habitat reported have been clarified in the Plan. For the remaining area not specified by a percentage, there are no particular prescription area objectives.

#### **564.** Public Concern: The Forest Service should specify details of timber management, as requested.

Response: Management of mixed mesophytic forests will occur across the spectrum and not in any one variant of this forest type. White pine and hemlock tend to occur together. Xeric and mesic oaks tend to intergrade and can be difficult to separate. Key in this habitat was oak & fire. Identified niches or needs will be considered site specifically. Our viability analysis work identified mesic hardwood forests as important, but did not single out other types. Objective 1.3.A provides for acquisition of any high elevation forest. Mature forest habitat information is presented in the Vegetation Cover section of the EIS. The amount needed is in our process record and is available upon request. Canopy gaps are generally of the size created by 1-3 trees, but can be larger based on-site specific project analysis. Number is based on site-specific considerations. Differences between natural and created canopy gaps are determined by management response to natural gaps and management design of created gaps. See EIS for analysis. Open Mid-story and understory means few to very few midstory trees or shrubs, or in some cases no midstory trees and shrubs in at least part of the area. See EIS, Fragmentation section. See the Plan for standards and objectives related to snag size and number in areas in which vegetation management is planned. See the MIS section of the EIS and the Viability section of the EIS Appendix for information on species. (Taylor)

#### 565. Public Concern: The Forest Service should specify the age of hard mast producing stands.

**Response:** This habitat element is defined as 50-150 year old oaks. Hickory and beech provide additional, although small, acreage.

# **566.** Public Concern: The Forest Service should more clearly specify herbaceous and shrub management.

**Response:** Site-specific analysis will consider forest types, topographic locations as well as numerous other considerations to provide the most appropriate herbaceous and shrub species mix for the site.

### **567.** Public Concern: The Forest Service should explain the apparent discrepancy of analysis among alternatives for younger forest habitats.

**Response:** The apparent discrepancy is the result of effects that differ by alternative. It is assumed for alternatives that one percent of the forest on average per year is affected by natural disturbance creating young forest habitat. Not all natural disturbance creates young forest habitat and not all disturbance is well distributed. In some instances, it is expected that natural disturbance will provide what is needed. In other instances it will not. This is a site-specific consideration.

### **568.** Public Concern: The Forest Service should clarify discrepancies in openings and early successional habitat.

**Response:** Openings as used in the Demand Species section of the EIS refers to grassy opening, not early seral forest. The discussion of alternative B-1 in this section of the EIS has been clarified.

**569.** Public Concern: The Forest Service should not create a patchwork of disturbance-maintained habitats because according to a Forest Service archeologist, the region used to be characterized by large tracts of mature interior forest.

**Response:** Scientific evidence also exists that forests in this region were indeed influenced by disturbance that resulted in a patchwork of stem densities, crown covers, and species composition. Specific provisions for mature interior forest habitat have been made in the 1K-Prescription Area (1K-Objective-1C).

#### MANAGEMENT PRESCRIPTIONS

**570.** Public Concern: The Forest Service should not implement management prescriptions, unless restrictions are relaxed because restrictions will create forest health problems.

**Response:** The restrictions (standards) that have been placed on certain activities are necessary for the maintenance of certain habitat elements, including water quality. Forest Health is a Forestwide goal.

**571.** Public Concern: The Forest Service should specify that timber harvest is prohibited in prescription areas containing special and sensitive areas, as recommended.

**Response**: Clarification for the term "unsuitable for timber production" has been incorporated in the setting information for each prescription area. This clarification identifies where timber harvest could occur. Standards (restrictions) provide for the protection of sensitive resources and additional restrictions may be added based upon a site-specific analysis.

**572.** Public Concern: The Forest Service should integrate acreage amounts with the prescriptions areas and consider how diversity will be affected.

**Response:** The acreage for each management prescription is displayed under the Setting heading of each prescription. The allocation of management prescriptions is also displayed in Table C - 3 of the Plan Appendix, and again for all alternatives in Tables 2 - 1 through 2 - 7 in the FEIS. Percentages may be calculated from these tables.

**573.** Public Concern: The Forest Service should use appropriate stocking controls and release techniques to accomplish thinnings.

**Response:** We are specifically planning on doing so (see 2.1-Objective-A). In addition, all silvicultural and vegetation "tools" are available for management of the Forest (see Plan, Appendix H).

### **574.** Public Concern: The Forest Service should not thin the Habitat Diversity Emphasis Area based on the Gingrich Stocking Chart because it is not appropriate for the forest ages indicated in the draft.

**Response:** The Gingrich Stocking Chart is the best stocking guide now available. Until more information on the management of older stands becomes available, this chart will be graphically extended. The chart's recent use in a NEFES publication is referenced in the EIS (Timber Products, Effects, Alternative C, C-1, D). No definition for the term "operational age" was found in the Dictionary of Forestry. However, there seems to be a significant difference in the ages suggested as compared to typical mortality of species in our Old-growth Guidance. We assume "operational age" is an economic definition, and therefore may not relate well to the management objectives in the preferred alternative.

# **575.** Public Concern: Loss of overstory species will occur due to gypsy moth and other stressors such as global warming, unless shade intolerant and intermediate species are regenerated and maintained in a well stocked and vigorously growing condition.

**Response:** We understand that stand mortality will increase beyond the culmination of periodic annual increment (CPAI), and that old trees are more likely to die than middle-aged trees, other factors being equal. Eventual loss of some overstory is necessary for development of vertical structure, which is part of the desired condition of the 1K-Habitat Diversity Emphasis Prescription Area. We have not seen research that would indicates that shade-tolerance correlates with gypsy moth risk. The effects of global warming are beyond the scope of this analysis.

### **576.** Public Concern: The Habitat Diversity Emphasis Area should have a maximum age of 120-140 years to maintain species composition and individual tree health.

**Response:** Beyond potential effects of catastrophic events, we estimate that at age 150, the average upland stand will begin a decline in volume, since mortality will exceed growth (from Daniel Boone National Forest yield tables). Some individual trees will be "unhealthy," but the overall stand health (see glossary definition) may be acceptable. Regardless of stand age, oak and pine natural regeneration is expected where stand densities are low and fire and other site factors are favorable.

### **577.** Public Concern: The Forest Service should use techniques to manage for older age stands in the Habitat Diversity Emphasis Area, such as two-age systems.

**Response:** We plan on doing so. Thank you for your support.

# **578.** Public Concern: The Forest Service should emphasize timber production; increase strategic planning and effectiveness; protect clifflines, riparian areas, and habitat; and manage the Habitat Diversity Emphasis Area in a manner that can be implemented by private forest owners.

**Response:** Private timberland owners typically have economic management objectives different from those of the Daniel Boone National Forest. Private lands with different objectives are not managed with the same prescription as the national forest. However, we believe that the concept of desired future condition (DFC) could be emphasized on any property, regardless of ownership. The Plan seeks to promote timber harvest in most prescriptions as a management tool to achieve scientifically-based desired future conditions; harvest is not allowed in a few prescription areas including designated Wilderness. Timber production suitability classifications have been clarified.

### **579.** Public Concern: The Forest Service should specify a prescription for pine-oak timber production that is separate from biodiversity goals.

**Response:** Pine restoration is treated differently between alternatives (EIS, Chapter 3, Timber Products, Resource Tables). Yellow-pine restoration is not an emphasis of Alternative E-1 (the timber production alternative), since yellow pine is not a high value or top value species (EIS, Appendix B).

### **580.** Public Concern: The Forest Service should not implement Habitat Diversity Areas or Forest Health/Biodiversity because it means more burning and logging.

**Response:** As the EIS indicates, forest health, biodiversity, habitat diversity, and the production of timber products are important public values.

#### LATE SUCCESSIONAL/OLD-GROWTH

# **581.** Public Concern: The Forest Service should conduct inventories of old-growth and develop acceptable plans, with explanation, for managing old-growth.

**Response:** The purpose of the Preliminary Inventory of Possible Old-growth was to identify potential existing old-growth stands. About 12,000 acres of POG was mapped across the Forest (EIS, Chapter 3, Table 3 - 29). A discussion and analysis of the old-growth issue is provided in the EIS, Chapter 3, Affected Environment and Environmental Consequences. This preliminary examination of old age conditions was conducted to determine if any areas potentially qualify under the old-growth age criterion (Process Record - Preliminary Inventory of Possible Old-growth). No known and documented existing old-growth, meeting the criteria in Forestry Report R8-FR-62 (USFS 1997b), was found on the Forest as a result of this preliminary examination of existing data. An additional examination of these older stands is planned to determine if other old-growth characteristics exist.

#### **582.** Public Concern: The Forest Service should protect, retain, and expand old-growth.

**Response:** Most of the land on the Forest that is designated as unsuitable for timber production is managed to feature specific resource objectives, such as riparian habitat, or have special designations, such as wilderness, that will incidentally result in old-growth conditions. This is about half of the forest. An additional 25 percent of the forest will move into the 100-200 year age group as a result of implementation of the Habitat Diversity Emphasis Area. The management objective for functional old-growth (Forestwide Objective 1.4.B.) is to develop and maintain at least 8 percent of each old-growth type in areas at least 300 acres in size.

A large portion of Daniel Boone National Forest forest land is in the 70-100 year age group. Harvest and regeneration within this group will better distribute forest age structure. The Revised Forest Plan prescribes 5-6 percent early-aged forest, per 10-year period, within the Habitat Diversity Emphasis Area (378,770 acres). About half of this area will grow into the 100-200 year age group, about a quarter of the Forest. In addition, designated areas such as wilderness, wild/scenic rivers, and other special designated areas will grow into old age forest structure. Prescription areas featuring specific resource objectives, such as riparian, cliffline, source water, old-growth and rare communities will also add to old age forest conditions.

# **583.** Public Concern: The Forest Service should clearly define how decisions would be made to reclassify lands as old-growth.

**Response:** Stands that currently meet the minimum old-growth age criterion have been identified and mapped as Possible Old-growth (POG). This identification was done to help determine the best locations for the Designated Old-growth Prescription Area. The currently identified POG stands represent about 12,000 total acres distributed across the Forest. An updated POG survey will be conducted for each project during the life of the Plan. The existing POG inventory will be updated during project planning. Each stand will be inspected for old-growth status. If identified as existing old-growth, a determination will then be made as to whether it will be retained as old-growth.

### **584.** Public Concern: The Forest Service should clearly define old-growth terms and use scientific analysis of ecosystem types and work with partners when establishing an old-growth network.

**Response:** There was some misunderstanding of the old-growth terminology used in the draft documents. The EIS and Revised Forest Plan have been edited to better explain the various aspects of old-growth and how the concepts used in the planning process will guide management actions. The glossary of old-growth terms has also been edited for clarification. Specific criteria for identifying old-growth conditions for the Daniel Boone National Forest have been provided by the Regional Office (Forestry Report R8-FR-62, USFS 1997b).

#### **585.** Public Concern: The Forest Service should refer to old-growth as mature forests.

**Response:** We respectfully disagree. Old-growth is defined by a specific set of conditions for each forest type (Forestry Report R8-FR-62, USFS 1997b). "Mature forests" may, or may not, contain these conditions, and is therefore not synonymous with "old-growth forest".

# **586.** Public Concern: The Forest Service should use the analysis of natural areas conducted by the Nature Conservancy and the Kentucky State Nature Preserves Commission for designating mature/old-growth habitat.

**Response:** Our intent was to provide older forest mixed with younger forest and canopy breaks (not old-growth) within areas our bird survey data show to be heavily used by the cerulean warbler. We looked for these high cerulean use areas and found the three identified. Site-specific projects will develop the actual configuration and location of the areas.

At present, the Daniel Boone does not have documentation of any areas that meet all the old-growth criteria outlined in the regional guidance on old-growth. However, some areas may exist. The Designated Old-growth Prescription Area is detailed in Chapter 3 of the Revised Forest Plan.

# **587.** Public Concern: The Forest Service should designate old-growth stands where they can be managed and then strategically position old-growth stands adjacent to areas with developing old-growth, such as wilderness areas.

**Response:** We agree. However, the selection of the Designated Old-growth Prescription areas was made in part to improve under-represented old-growth forest types. These nine areas encompass 15,300 acres with a strong representation of dry-mesic oak and mixed mesophytic hardwood (including American beech). Distribution and older age conditions were also primary considerations in the selection.

### **588.** Public Concern: The Forest Service should designate the White Oak and Sinking Creek areas as old-growth.

**Response:** One Designated Old-growth area was selected in the White Oak watershed (see EIS, Chapter 3, Old-growth Effects Analysis, Table 3-31).

### **589.** Public Concern: The Forest Service should establish minimum size goals for old-growth areas and combine old-growth patches into one natural area.

**Response:** As stated in the old-growth sections of both the Plan and EIS, we have set 300 acres as the minimum size for old-growth areas intended to support old-growth associated species, realizing that some level of natural disturbance will occur. Smaller areas may be designated for other purposes. The Designated Old-growth areas and most Future Old-growth areas exceed this area size (see EIS, Chapter 2, Old-growth Issue, Table 2 - 9 and Table 2 - 10). This provision is also included as a Forestwide Objective, 1.4.B.

### **590.** Public Concern: The Forest Service should provide comparative information on old-growth dependent species, old-growth habitat, remoteness, and forest interior habitats.

**Response:** Chapter 3 of the EIS describes effects on Proposed, Endangered, Threatened, and Sensitive (PETS) species. The effects analysis on old-growth also can be found in the old-growth section of that chapter. As stated in the EIS (Chapter 2, Table 2-11) about 41 percent (271,688 acres) of forested land on the Daniel Boone National Forest is expected to develop into old-growth forest habitat, much of which will be functional in size. All old-growth forest types are represented within these areas. We believe that old-growth associated species will be well provided for within these areas and will persist over time on the Forest.

# **591.** Public Concern: The Forest Service should restore old-growth pine-oak woodland complexes and provide for the recovery of the red-cockaded woodpecker.

**Response:** Restoration of the pine dominated woodland and forest communities is planned as part of the 1.K-Habitat Diversity Emphasis Prescription Area. Although it will take many decades (probably 50+ years) to begin development of suitable red-cockaded woodpecker habitat, it is a long-term consideration.

#### **592.** Public Concern: The Forest Service should treat old-growth as wilderness.

**Response:** Mature forest conditions will be sustained through both the Habitat Diversity Emphasis Prescription Area and old-growth provisions of the Revised Forest Plan.

#### 593. Public Concern: The Forest Service should not thin or burn old-growth.

**Response:** Reference is to fire- and disturbance-maintained forest communities. Conditions can only be perpetuated on the Daniel Boone National Forest within the range of current capabilities.

### **594.** Public Concern: The Forest Service should specify that old-growth will not be subject to timber harvest.

**Response:** Project-level decisions must follow the planning process (NEPA) and involve public review and participation. These small stand size areas are most likely not functional in supporting associated interior species or sustainable within the range of natural disturbance. However, they may be appropriate in addressing social or recreational interests and maybe retained based on a site-specific determination. Any vegetative manipulation within Designated Old-growth areas will occur only to improve and/or sustain the long-term perpetuation of the old-growth community.

### **595.** Public Concern: The Forest Service should prohibit salvage and sanitation activities in old-growth.

**Response:** Since major disturbance events will affect the old-growth areas on the Forest, Standards 1.I-Veg-3 and 1.I-Veg-4 are important to facilitate old-growth recovery.

### **596.** Public Concern: The Forest Service should modify objectives and standards regarding old-growth, as recommended.

**Response:** The Objectives and standards are appropriate as written.

## **597.** Public Concern: The Forest Service should analyze and disclose details of the effects of old-growth timber harvest.

**Response:** This objective is provided to support development of old-growth conditions on very dry poor quality sites. Selective thinning may be necessary to achieve old-growth conditions and sustain forest composition due to limited nutrients and site capability.

#### **598.** Public Concern: The Forest Service should manage old-growth forest for forest health.

**Response:** Old-growth management will be applied to move toward the Desired Future Conditions identified for the Designated Old-growth Prescription Area, and to develop and sustain specific old-growth criteria as provided in Forestry Report R8-FR-62 (USFS 1997b). Early and mid-successional forest characteristics will not be favored, however tree fall gaps and multi-layered forest structure will tend to represent these structural attributes. Applied management will be specific to old-growth type as needed to sustain disturbance and fire mediated communities. The Plan calls for a 10-year order of entry which will systematically achieve inventory, treatment, and monitoring needs across the forest landscape on a 10 year cycle. Scheduling specific treatments and project site spatial relationships will be addressed at the project planning level.

Biological and ecological diversity across the landscape will be improved, adding to resilience of the forest ecosystem, although individual tree health may be reduced. Planned conditions are within the range of historic variability. Non-native invasive species will continue to be a significant threat to forest sustainability.

### **599.** Public Concern: The Forest Service should design old-growth to float across the landscape, with rotation age lengthened and allowable sale quantities increased.

**Response:** Old-growth in many forest types is not a fundamentally even-aged structural condition. The multi-layered, gap regeneration character of mesic old-growth adds an element of diversity to the predominantly even-aged managed landscape of the Forest. It is not possible to lengthen rotation and increase the allowable sale quantity (ASQ) on the same land-base and still maintain a sustained yield. Both Possible Old-growth (POG) and Future Old-growth (FOG) are fixed areas based on a one-time analysis, and acreage considerations will not change over the life of the Revised Forest Plan. FOG does not apply to the Habitat Diversity Emphasis Area. Disturbance events were a primary consideration in providing for functional old-growth in the plan. Wilderness areas do contribute to FOG on the Forest.

#### **600.** Public Concern: The Forest Service should acknowledge the conflict in Goal 1.8 with the number of acres of proposed old-growth.

**Response:** Old-growth projected on the Daniel Boone National Forest will occur both through intent (Designated Old-growth Areas) and incidentally in low-level disturbance prescription areas (Future Old-growth). With the addition of the old-growth community, diversity across the landscape will be improved, adding to resilience of the forest ecosystem. However, individual tree health may be reduced. Planned conditions are within the range of historic variability. Non-native invasive species will continue to be a significant threat to forest sustainability.

# **601.** Public Concern: The Forest Service should not designate additional old-growth. The Forest Service should eliminate the Old-growth Prescription Area and reallocate acreage to the Habitat Diversity designation.

**Response:** Old-growth is defined by specific criteria for each type in Forestry Report R8-FR-62 (USFS 1997b). The old-growth community is a natural part of the forest ecosystem containing structural characteristics that are not expected in an even-aged system of management. Both dry-mesic oak and mixed mesophytic hardwood (including American beech) were under-represented within Future Old-growth, as related to composition on the Forest.

#### **EARLY SUCCESSIONAL**

## **602.** Public Concern: The Forest Service should increase early successional forest habitat to maintain flora and fauna and improve the status of imperiled species.

**Response:** We believe the mix of habitats supported by Plan direction provides adequately, within the Forest's management capability, for species with moderate to very high likelihood of risk to viability.

### **603.** Public Concern: The Forest Service should increase early successional forest habitat to benefit wildlife, wildlife habitat, and hunting.

**Response:** We believe the mix of habitats supported by Plan direction provides adequately for commonly hunted species and others found in early seral habitat, including birds. Specific management is included for grouse, but deer do not appear to be responding to early seral habitats (see MIS discussion in the Vegetation Cover section of the EIS). Woodlands and wooded grasslands/shrublands plus thinned forest will provide early seral elements usable by many species. We intend other management, such as burning and thinning, to provide for continued oak forest habitat on the Forest.

#### 604. Public Concern: The Forest Service should not create early successional habitat for deer.

**Response:** We do not specifically create early seral habitat for deer. Deer use a variety of habitats, and it is expected that will take advantage of early seral habitat if present. Additionally, our recent review of MIS information indicates that deer do not respond to the amount of early seral habitat on the Forest (see MIS discussion in the Vegetation Cover section of the EIS and USDA Forest Service 2000).

## **605.** Public Concern: The Forest Service should analyze the effects of timber harvest on species requiring mature habitat.

**Response:** The current early-age forest condition is skewed due to the recent, devastating impacts of the southern pine beetle. As provided in 1.K-Objective-1.A, the 0-10 year age class planned is 5-6 percent within the Habitat Diversity Emphasis Prescription Area. MIS should reflect the change in forest age structure by the end of the 10-15 year planning period as well as long-term. Analysis of the fragmentation issue is provided in Chapter 3 of the EIS.

### **606.** Public Concern: The Forest Service should determine the amount of early successional habitat that was present in the pre-European landscape.

**Response**: We have evidence that habitat with elements attributable to early seral habitat existed on the Forest (see Viability section of the EIS). Much of this would not have been in the form of a clearcut or low basal area shelterwood, but rather in the form of woodland as well as open, repeatedly burned forest or the mosaic of tangled structures associated with storm events. In association with the national effort to determine fire condition classes on the landscape, we will be addressing the question of amounts of contributing habitat on the landscape. The adaptive management approach we are taking will allow us to make adjustments as needed.

### **607.** Public Concern: The Forest Service should conduct analysis and disclose data on the effects of creating early successional habitat.

**Response:** We believe the direction presented in the Plan, particularly in the Habitat Diversity Emphasis Prescription Area, shows how this habitat type will be maintained. Other than the discussion of Old-growth (significant issue), which includes many considerations other than biological ones, early seral habitats were discussed as much as later seral habitats. The Rare Communities Prescription Area addresses the fact that many of these are indeed disturbance-dependent communities. The Plan direction presented provides for early seral habitat elements in many forms, e.g., areas of 0-10 year old forest, grassland, wooded grassland/shrubland, woodland, and open, burned forest.

To a large degree, prescribed management in the Plan is based on local existing bird survey and inventory data, the Northern Cumberland Plateau Bird Conservation Plan (Partners-in-Flight), and coordination with the USFWS – Division of Migratory Birds. Planned diversity in forest composition and age structure will provide and sustain the diverse assemblage of avian species of the Daniel Boone National Forest.

### **608.** Public Concern: The Forest Service should conduct analysis and disclose data on the effects of creating early successional habitat to include activities on private land and regionally.

**Response:** Ecosystem management, on which the Plan is based, requires landscape scale considerations and analysis. However, the National Forest Management Act requires that forest species be provided for within the planning unit (national forest ownership) to the extent practicable [CFR 219.19 and 219.27(g)], not within the proclamation or physiographic boundary. We used recent satellite data that indicated a slight increase in forest acres within the proclamation boundary (see Forest Fragmentation section in EIS). We acknowledge that over the entire Cumberland Plateau this is not the case (see Fragmentation Section of EIS), but this is not the analysis area considered (see Forest Fragmentation section of EIS). Please see the Vegetation Cover and Fragmentation sections of the EIS for analysis.

#### THE ROLE OF NATURAL DISTURBANCE

### **609.** Public Concern: The Forest Service should rely on natural disturbance as a tool for creating habitat diversity.

**Response:** The Plan provides for a variety of habitats to meet viability and other regulations. The Plan considers natural disturbances in determining habitat needs and includes disturbance conditions in computations. (Please see 1.K-Objective-1.) In addition, all projects are subject to site-specific analysis. If habitat elements created by natural disturbance provide the desired future condition, there is no reason to create additional areas of that habitat. Where natural disturbance alters important habitat elements, work may be prescribed to modify the condition.

**610.** Public Concern: The Forest Service should analyze and disclose the amount of early successional habitat created by natural disturbances. The Forest Service should acknowledge the role of insects, disease, and wildfire as natural disturbances in creating habitat diversity.

**Response:** We have indicated in the EIS that we expect about one percent of Forest habitat per decade to resemble what is usually called early successional (similar to a clearcut or shelterwood cut). Additional storm damaged areas are expected to occur, but will not have habitat similar to early successional conditions.

#### **COMMERCIAL TIMBER HARVEST**

# **611.** Public Concern: The Forest Service should limit logging to storm damaged trees and very limited timber harvests for research purposes only.

**Response:** Such an alternative appears to be similar to alternatives B or B-1, which are not preferred for various reasons including forest health and species viability considerations. In addition, the Forest Service has several Experimental Forests dedicated for forest research in our region. The Southern Forest Research Station determines the location and need for these areas.

**612.** Public Concern: The plan should contain provisions for a timely workable disaster response, because the lack of a plan has resulted in waste from the 2003 ice storm.

**Response:** Planning for salvage operations must be done on a project-level basis.

613. The Forest Service should allow commercial timber harvest, especially in riparian areas.

**Response:** Although harvesting will be reduced in riparian areas, the Plan does not eliminate timber harvest from these areas. Harvesting may occur when it moves the area toward a desired future condition.

**614.** Public Concern: The Forest Service should reduce commercial timber harvest and redirect funding into forest restoration, which will also create jobs.

**Response:** Timber harvesting is one of many tools that will be used to restore and maintain a diversity of desired ecosystem conditions, including a certain amount of early-successional habitat. The harvest of woods that are in an undesireable condition, to allow regeneration and development of more desireable woods, is a part of that restoration.

615. Public Concern: The Forest Service should not allow commercial timber harvest.

**Response**: We respectfully disagree. The cutting of trees to create various patterns of openings and the development of varying structure in the Forest has been determined to benefit the diversity of life on the Daniel Boone National Forest (EIS, Chapter 3, Biological Elements). Such trees can be cut and left for wildlife purposes (e.g. 1K-Objective-1M), or cut and used by society. The former option will generally cost the taxpayer more than the latter, thus the need for the option of commercial harvest.

**616.** Public Concern: The Forest Service should develop and adopt an alternative that eliminates commercial timber harvest.

**Response:** We considered such an alternative but determined that it did not warrant further evaluation for several reasons (see EIS, Chapter 2, Alternatives Considered but Eliminated).

**617.** Public Concern: Based upon a Kentucky statewide opinion poll The Forest Service should have included cessation of commercial timber harvest in each alternative.

**Response:** The question used in the referenced poll leads the respondents to a predictable response. Polls are typically less reliable than most scientific sampling techniques. Many polls, surveys, and other sampling techniques were considered during the planning process.

#### **Environmental Considerations in Timber Program**

## **618.** Public Concern: The Forest Service should conduct silvicultural applications and vegetation management within riparian areas.

**Response:** We agree. We plan on doing necessary vegetative management activities to achieve the desired future condition within the riparian prescription area.

### **619.** Public Concern: The plan will lead to long-term degradation of timber quality on the Daniel Boone National Forest, leading to loss of forest and the decline of ecosystem health.

**Response**: We know of no research that indicates that the average 190 year-old stand is of less value than the average 100 year-old stand. Our upland hardwood volume tables indicate that as stand volume declines beyond age 150, average diameter at breast height (dbh) continues to increase. Quality generally increases with average stand diameter. Since there is little information available on the growth and yield of older stands, the analysis of the management situation (AMS) done each decade should lead to adjustments in the Plan, if a decline in timber quality becomes evident.

### **620.** Public Concern: An increasing acreage of overstocked conditions for all forest types runs counter to the President's Healthy Forest Initiative.

**Response**: We are planning active forest management on all lands classified as suitable for timber production. We also have the option of correcting overstocked conditions on a significant portion of the forest classified as unsuitable, since thinning may occur where needed to meet the desired future condition (see Forestwide Objective 2.1.A).

# **621.** Public Concern: The Forest Service should give special consideration when planning timber sales in riparian areas, clifflines, and cave areas.

**Response:** The Plan provides for such consideration.

#### **622.** Public Concern: The Forest Service should not allow timber harvest because it has detrimental effects on the environment.

**Response:** The Environmental Impact Statement explains that the preferred alternative has a positive overall effect on the viability and diversity of wildlife, songbirds and native plants, while having a limited impact on other factors of the environment.

#### **623.** Public Concern: The Forest Service should not allow timber harvest because timber harvest increases the risk of fire.

**Response:** Tree cutting activities (e.g. harvest, non-commercial thinning, or site preparation) can temporarily increase the ignition and severity potential for fire within the disturbed areas, when weather and moisture conditions are within certain ranges. These factors are used to advantage as many of these areas, in fact, could be burned during reforestation treatment. In eastern forests this is an expected localized condition, and the chance (or risk) of spread beyond the treated stands is minimal.

### **624.** Public Concern: The Forest Service should prohibit timber harvest within 300 feet of threatened and endangered and sensitive species.

**Response:** Several forestwide, programmatic prohibitions have been established in the Revised Forest Plan concerning many management activities, including timber harvest, as they relate to proposed, endangered, threatened, and sensitive species. These are minimum distances. Second level, site-specific analysis will determine whether or not additional restrictions of management activities are needed.

#### **625.** Public Concern: The Forest Service should modify Standard 5.C-VEG-1 by restricting timber harvest within 300 feet of a perennial stream.

**Response:** The standard has been modified along with 5.C-Objective-2.A.

**626.** Public Concern: The Forest Service should modify Standard 5.C-VEG-1 for Zone 1, as recommended, and prohibit timber harvest in all three zones.

**Response:** In Standard 5.C-VEG-1, a sentence has been added after "Zone 1" for clarification. Your other comments were considered but we believe the standards as written are appropriate.

**627.** Public Concern: The Forest Service should prohibit timber harvest in areas with slopes greater than 45 percent, to prevent harm to thin and erodible soils.

**Response:** Many of these areas within the 1K-Prescription Area are classified as unsuitable for timber production due to economic reasons (Plan, Appendix C, Timberland Suitability Classification). However, in some situations on steep slopes where timber harvest is needed, cable yarding systems can be used with little soil impact to achieve the desired condition. Several Forestwide vegetation standards are intended to prevent soil loss.

**628.** Public Concern: There should be no need for timber harvest to improve habitat on the Morehead Ranger District in the area affected by the 2003 ice storm.

**Response:** This is a site-specific concern, out of the scope of a programmatic Plan. Such catastrophic events will require a project level analysis to determine if any action is needed to help move the area toward the desired future condition specified in the Plan.

**629.** Public Concern: The Forest Service should monitor timber harvest sites to ensure that aftereffects of timber sales comply with the Plan.

**Response:** The implementation, effectiveness, and validation monitoring we have planned is disclosed in the Plan (see Chapter 5 and Appendix D).

**630.** Public Concern: The Forest Service should analyze and document the effects of timber harvest on soil productivity, arthropods, and fungi.

**Response:** Where soils are properly managed, timber harvest operations can protect and enhance soil properties and qualities.

**631.** Public Concern: The Forest Service should specify details for skid routes as well as analyze and provide the details of skid trail effects on soils and vegetation.

**Response:** Chapters 2 and 3 of the Plan, along with the Forest Service Manual and handbooks, provide for the protection of soils. Additional protections will be recommended, as needed, at the project level based upon the characteristics of the sites the projects will impact. We believe that the level of analysis needed at the strategic (Revised Forest Plan) level has been achieved.

**632.** Public Concern: The Forest Service should specify how soil compaction by tractors and skidders will be addressed.

**Response:** Chapters 2 and 3 of the Plan, along with the Forest Service Manual and handbooks, provide for the protection of soils. Additional protections will be recommended, if needed, at the project level based upon the characteristics of the sites the projects will impact.

### **633.** Public Concern: The Forest Service should better analyze the effects of timber harvest on slope stability.

**Response:** Chapters 2 and 3 of the Plan, along with the Forest Service Manual and handbooks, provide for the protection of soils. Additional protections will be recommended, if needed, at the project level based upon the characteristics of the sites the projects will impact. We believe that the level of analysis needed at the strategic (Revised Forest Plan) level has been achieved.

**634.** Public Concern: The Forest Service should analyze timber harvest on private land for its effects on the Daniel Boone National Forest.

**Response:** Forest Inventory and Analysis (FIA) information was considered in the Timber Supply and Demand Economic Report which may be viewed at the following website location: <a href="http://www.southernregion.fs.fed.us/boone/planning/documents.htm">http://www.southernregion.fs.fed.us/boone/planning/documents.htm</a>.

**635.** Public Concern: The Forest Service should analyze the effects of the timber program for each alternative.

**Response:** The headings of the EIS fall under two major categories: "Environmental Factors" and "Resource Programs." Within each of the Environmental Factors, the author had the option of discussing the effects of each resource program on that factor or sub-part of that factor or discussing the combined effect. Each author presented his or her section in the most appropriate fashion.

#### **Socioeconomic Considerations in Timber Program**

**636.** Public Concern: The Forest Service should target added-value timber products.

**Response:** Forestwide Goal 16 generally addresses this concern, although there are no specific objectives. A variety of species and log sizes will be made available now and in the future as primary forest products. However, the Forest Service generally has had little influence on the development of secondary forest products markets and business.

**637.** Public Concern: The Forest Service should specify guidance on thinning to promote harvest of high-value saw timber and veneer.

**Response:** An objective has been added to Forestwide Goal 8 to provide direction for leave tree selection.

**638.** Public Concern: The Forest Service should conduct ecosystem-based community forestry that benefits the community and prohibits sale of timber to corporations whose profits leave the community or who have violated environmental laws or worker rights.

**Response:** The Revised Forest Plan provides for forest management practices that are beneficial to local communities in a variety of ways. Individual national forests do not have the authority to impose constraints on export of logs from national forest timber sales or on the eligibility of timber sale bidders based on infractions not associated with national forest timber sales.

**639.** Public Concern: The Forest Service should not be concerned with "below cost sales;" costs should not be what drive forest management.

**Response:** There are no profit or other financial goals in the Plan. Responsible financial management is of overall management and Plan implementation.

**640.** Public Concern: The Forest Service should not provide additional timber to harvesters as a gift for conducting salvage harvests.

**Response:** Timber sales occur as a result of implementation of the Revised Forest Plan. All sales, including salvage, are conducted openly and occur only when a reasonable and fair market price is paid for the timber or a service equal in value is returned to the Forest.

**641.** Public Concern: The Forest Service should disclose data regarding timber production as a percentage of that harvested in Kentucky and the region.

**Response:** This information has no bearing on the selection of an alternative or the selection of timber harvesting as a tool to obtain a desired future condition.

**642.** Public Concern: The Forest Service should analyze local needs for wood processing facilities and the effects of Daniel Boone National Forest timber on local markets and pricing.

**Response:** Analyzing the local needs for wood-processing facilities is outside the scope of the Revised Forest Plan. The significant economic effects to the local economy are disclosed in the Socioeconomic section of the FEIS.

643. Public Concern: The Forest Service should disclose full costs of the timber sales program.

**Response:** Budget levels for each alternative are displayed in Appendix B of the FEIS.

**644.** Public Concern: The Forest Service should not subsidize timber harvest, roads for timber harvest, or replanting.

**Response:** Direction for financial management is outside the scope of the Revised Forest Plan. However, as part of Plan implementation, the Forest Service pays a fair market price for all contracts. No subsidies occur.

#### **Allowable Sale Quantity**

**645.** Public Concern: The Forest Service should increase the allowable sale quantity (ASQ) to maintain forest health.

**Response:** The resulting condition of the forest and amount of acres harvested has more to do with a healthy forest, than the amount of timber harvested. We believe that forest health will be maintained as a result of the planned activities of the preferred alternative.

**646.** Public Concern: The Forest Service should adjust the allowable sale quantity to provide for a rotation age of 120 years that maintains oak-dominated species.

**Response:** The loss of an oak component in stands is due to inadequate oak regeneration, not a loss of oak due to excessive stand age (see EIS Chapter 3, Forest Health, Prescribed Fire). A greater oak component will result with increased prescribed burning and thinning. If excessive mortality occurs in older oak stands, regeneration may be needed. Clarification has been made in 1.K-Objective-1.A to explain that shorter effective rotations may occur where needed.

**647.** Public Concern: The Forest Service should reduce the allowable sale quantity (ASQ), because the current timber harvest within Kentucky is unsustainable.

**Response:** The ASQ set for each alternative is sustainable, based on our analysis (EIS Chapter 3, Timber Products, Effect of the Long Term Sustained Yield Goal). The Forest Service has no authority to regulate timber harvest from private lands.

**648.** Public Concern: For economical and other practical reasons, the Forest Service should not reduce the allowable sale quantity.

**Response:** Economic perspective differs from one interest to another. Alternatives E and E-1 that generally emphasized timber production and other economic concerns were considered (EIS Chapter 2, Alternatives) but not selected.

#### **Harvest Methods**

**649.** Public Concern: The Forest Service should modify Standard 1.E-VEG-1, as recommended, to allow the use of cable timber harvest methods within riparian areas.

**Response:** Standard 1E-VEG -1 has been modified as needed. The desired future condition for roads within the Riparian Prescription Area is described in the text, and standards are displayed under the Roads/Engineering heading (Plan, Chapter 3, 1.E-Riparian Corridor).

**650.** Public Concern: The Forest Service should modify Standard 1.E-VEG-1, as recommended, to prohibit the use of cable timber harvest, and other vegetation manipulation within riparian areas, to prevent sediment from washing into stream/riparian areas.

**Response:** Some vegetation manipulation will be necessary to achieve the desired future condition within the Riparian Corridor Prescription Area. Control of sediment levels is a major consideration within this prescription area and is integrated into the design of the desired future condition as well as within the standards (Plan, Chapter 3). Cable logging has been shown to cause less environmental impact on steep slopes than tractor skidding (EIS Chapter 3, Soil and Water).

**651.** Public Concern: The Forest Service should modify language in cliffline vegetation management standards to allow the use of heavy equipment and timber harvest.

**Response:** Standard 1C-VEG-2 has been modified.

**652.** Public Concern: The Forest Service should create young forest across 8-10 percent of riparian areas in 5-10 acre blocks with stem densities of 6,000+ per acre.

**Response:** Vegetative manipulation is planned in the Riparian Corridor Prescription Area to stimulate shrub development within 2 to 4 percent of the area. Half of this open canopy structure will be maintained using uneven-aged regeneration methods (1.E-Objective-2.C) and the other half using permanent shrub/sapling openings (1.E-Objective-2.B). In addition 1 to 2 percent of the riparian area will be maintained in canebrakes, and canopy gaps will occur randomly as a result of natural disturbance. We believe that this riparian disturbance habitat will adequately provide for the viability of ruffed grouse, woodcock, and other riparian associated species.

### **653.** Public Concern: The Forest Service should increase the maximum size of cuts for early successional habitat within riparian areas to 5-10 acres.

**Response:** Most of the riparian corridor is unsuitable for timber production, with only 2,151 acres are classified as suitable. Uneven-aged management does not track the spatial distribution of openings. Instead, treatments are based on tree diameter distribution to achieve and sustain an identified growth curve. This silvicultural system was selected for limited application in the riparian corridor to provide a shrub component without introducing potentially adverse effects of edge created by larger openings.

#### 654. Public Concern: The Forest Service should create early successional forest using clearcuts.

**Response:** Clearcut harvest and stand regeneration methods are available for management applications across the forest. These may be applied as appropriate through site-specific determination.

#### 655. Public Concern: The Forest Service should conduct controlled clearcut timber harvest.

**Response:** Early-aged forest habitat will be provided primarily within the Habitat Diversity Emphasis Prescription Area, which includes over half of the forest, distributed across the landscape. Clearcut harvest and stand regeneration methods are available for application as appropriate to achieve desired future conditions and will be determined through a site specific examination.

# **656.** Public Concern: The Forest Service should not conduct clearcut or other even-aged timber harvest methods the Forest Service should specify standards that limit the use of clearcuts to restoration.

**Response:** The clearcut method is specifically prescribed only in the Ruffed Grouse Emphasis Prescription Area. The method of harvest will be determined on a site-specific basis. The specific technique needed to attain a desired future condition will determine the technique employed.

#### 657. Public Concern: The Forest Service should use selective (uneven-aged) timber harvest methods.

**Response:** Selection method is specifically to maintain a small amount of uneven-aged forest in the Riparian Prescription Area (1.E-Objective-2.C). The method may also be useful in other prescription areas, as determined on a site-specific basis.

## **658.** Public Concern: The Forest Service should require cut-to-length (CTL) logging equipment (forwarders) to prevent erosion and compaction.

**Response:** The need for limitations on logging equipment is determined on a site-specific basis. The slope and soils are elements in that analysis.

### **659.** Public Concern: The Forest Service should use two-age shelterwood timber harvest that retains snag and den trees.

**Response**: Two-age shelterwood timber harvest that retains snag and den trees will be used whenever it will help achieve desired future conditions.

#### **660.** Public Concern: To prevent soil erosion, the Forest Service should not conduct shelterwood timber harvest.

**Response:** Timber harvesting (regardless of method) can be done with minimal soil movement and sedimentation. As the EIS explains, "with successful revegetation of bare soil area, erosion and sedimentation rates should diminish rapidly to pre-disturbance levels within three years. The greatest decrease (occurring) in the first two growing seasons."

### **661.** Public Concern: The Forest Service should conduct timber harvest using small operators with portable saws, since mounds of sawdust and piles of slabs make good wildlife habitat.

**Response**: Such operations are not precluded by the Revised Forest Plan and could be prescribed based upon site-specific analysis.

### **662.** Public Concern: The Forest Service should not have seed production areas, which could result in a loss of genetic diversity.

**Response**: Tree seed production areas scattered throughout the southern region support the Forest Service's genetic tree improvement research that has been operating in the region for many years. Issues involved with this program are beyond the scope of this Plan. More information concerning this program can be found by beginning a search at <a href="http://ntsl.fs.fed.us/">http://ntsl.fs.fed.us/</a>

### **663.** Public Concern: The Forest Service should use proven mid-story and understory control treatments as well as fire as an experimental treatment.

**Response:** It has been shown in the EIS that tree regeneration (especially oak and yellow-pine), tree density, and habitat goals will likely depend on the reintroduction of fire. The plan contains provisions to closely monitor the effects of fire on these factors (Plan, Appendix D). We expect continuing and new research to develop around the fire program (Plan, Appendix E).

### **664.** Public Concern: The Forest Service should specify standards for timber harvest that benefit wildlife species.

**Response**: Provisions for the retention and development of snags to benefit wildlife are contained in Forestwide Standards DB-WLF-2 and DB-WLF-14. The 1.K-Habitat Diversity Prescription Area contains provisions to benefit wildlife (1.K-Objective-1.N and Standard 1.K-VEG-1). Downed woody material is provided for in the 1.K-Habitat Diversity Emphasis Area (1.K-Objective-1.M) and the Ruffed Grouse Emphasis Area (Standard 3.H.1-WLF-1).

### **665.** Public Concern: The Forest Service should modify standards regarding timber harvest and vegetation, as recommended.

**Response:** DB-VEG-2; there might be situations where we need these tools, as determined on a site-specific basis. DB-VEG-6; it can be assumed that ephemeral streams are included in this standard. DB-VEG-22; temporary openings are just that – they are temporary. Although a shelterwood with reserves and wooded grassland may be similar in appearance for a short period, regeneration is encouraged under the shelterwood, not in the adjacent wooded grassland. DB-VEG-23; CFR 219.27(d)(2) limits the size of evenaged openings. The USDA Forest Service Region 8 standard for the minimum distance separating evenaged regeneration areas (330') is in the Daniel Boone National Forest's 1985 Forest Plan. DB-Veg-24; only one cut is normally needed for the regeneration of two-aged stands.

#### 666. Public Concern: The Forest Service should clarify DB-WLF-2.

**Response:** This standard has been reworded for clarification.

## **667.** Public Concern: The Forest Service should seed skid trails and log landings to provide vegetative cover.

**Response:** Re-vegetation of skid trails and log landings is provided for in the Plan under Forestwide Standard DB-ENG-4. It is also addressed in Forestwide Guideline Engineering-5 and Ruffed Grouse Emphasis Area Guideline 3.H.1-VEG-5.

**668.** Public Concern: The Forest Service should modify Standard 1E-VEG-3. Any timber cut should be salvaged to recover costs as well for the control and suppression of insects and disease.

**Response**: The wording in standard 1E-Veg-3 was developed to ensure incorporation of large woody debris into aquatic systems. However, the standard is worded to allow other options if needed.

**669.** Public Concern: The Forest Service should conduct detailed analysis that compares the effects of timber harvest methods on proposed, endangered, threatened, and sensitive species.

**Response:** The DEIS provides a programmatic comparison of effects of all alternatives to proposed, endangered, threatened, and sensitive species (pp. 3-187 to 2-195). The Biological Assessment, dated November 6, 2003, provides individual species analysis for the preferred alternative (C-1). The Biological Opinion for the Revised Forest Plan has not, as yet, been written by the USFWS. Under the Revised Forest Plan shelterwood trees are generally retained in the stand until the next rotation. The new Plan also contains specific prescription areas specifically delineated to provide habitat benefits to a large number of proposed, endangered, threatened, and sensitive species.

#### **Thinning and Stand Improvement**

**670.** Public Concern: The Forest Service should increase allocations for timber stand improvement to 10,000 acres per year.

**Response:** The Revised Forest Plan is not restrictive in the amount of acres that could be thinned or have stand improvement, rather the Plan provides for those activities to occur. When considering the environmental effects, as documented in the environmental impact statement, a figure was derived based on current and predicted budgets.

**671.** Public Concern: The Forest Service should specify objectives for thinning in the marking guidelines.

**Response:** Goal 8.3 was added to emphasize the priority of achieving habitat objectives and then the improvement of stand survivability and potential timber value.

672. Public Concern: The Forest Service should analyze and disclose the purposes and effects of various thinning practices. Alternatives such as thinning by means of prescribed fire or allowing the forest to self-thin should also be analyzed.

**Response:** The Revised Forest Plan provides for creating certain conditions across the landscape. To accomplish these objectives, a variety of techniques would likely be considered during project development. The environmental effects of various thinning techniques are best considered during site-specific project planning. Some thinning is likely to be the result of burning, some the result of cutting down trees, and some the result of self-thinning. Removal and marketing of trees is also likely to occur and is an appropriate activity on National Forest System lands.

#### RECYCLING AND ALTERNATIVES TO FOREST PRODUCTS

673. Public Concern: The Forest Service should promote the use of natural products for building construction and road construction. The Forest Service should promote recycling of wood products and ways to reduce waste. The Forest Service should promote sustainable energy such as solar and wind power as alternatives to coal and natural gas.

**Response:** The Forest Service promotes the efficient use and recycling of wood products and the use of solar and wind power when appropriate. The Research and the State and Private Forestry branches of the Forest Service generally lead these programs. Additional information can be found at <a href="http://www.fs.fed.us/na/morgantown/eap/fpcr/fpcr">http://www.fs.fed.us/na/morgantown/eap/fpcr/fpcr</a> pub.htm

**674.** Public Concern: The Forest Service should encourage the use of agricultural fiber and other alternatives for wood and paper fiber by not producing subsidized timber products.

**Response:** Encouraging markets for agricultural fiber is beyond the scope of the mission of the Forest Service; however, other agencies within the USDA may encourage such use. As land stewards (and consumers), we have a choice between maintaining diverse forest habitat in conjunction with the production of renewable wood fiber, or clearing forest land for agricultural fiber production.

#### **FOREST HEALTH MANAGEMENT (GENERAL)**

675. Public Concern: The Forest Service should state that forest health is a desired future condition.

**Response**: While the term "forest health" does not specifically appear in the discussion of the Forest in the short-term and in the long-term (Plan, pp. 2-2 through 2-4), essential elements for providing a healthy forest are present. The term "forest health" by itself does not describe the condition(s) that equate to a healthy forest. Implementation of the desired future condition descriptions, goals, objectives, and standards together should result in a healthy forest. The awareness that forest health is an issue was disclosed as a significant issue in the DEIS beginning on page 3-122.

**676.** Public Concern: The Forest Service should better define "forest health." The Forest Service should use a wider ecological concept of forest health beyond silvicultural and use-oriented values. The Forest Service should not use the term "forest health" because there is no widely accepted definition for this concept.

**Response**: Any single definition for "forest health" has been and will continue to be debated. The scientific, political, and social communities all have different views of a healthy forest. The Revised Forest Plan defines forest health in its glossary (Appendix, p. A-12). The DEIS repeats the same definition on page 6-12. Further clarification of forest health was provided in the DEIS beginning on page 3-122. Simply pointing out "unhealthy" conditions may not lead to an acceptable or complete definition of forest health. Conditions may be unhealthy from one perspective but beneficial from another. Our goal is to provide a diversity of conditions.

#### **677.** Public Concern: The Forest Service should analyze and disclose the effects of numerous variables on forest health.

**Response**: The analysis described in the DEIS was intended to identify some representative indicators for use in assessing forest health, realizing that many other indicators also exist. The selected indicators were used to evaluate the current condition against changed conditions as a result of implementing management direction that moves toward desired conditions. Many of the suggested indicators would result in using similar vegetative conditions, such as tree age, stocking, species composition, etc., as was used with the chosen indicators. There is no indication that the results of the analysis would differ from those already disclosed.

# **678.** Public Concern: The Forest Service should develop plans and broader language to deal with alien species in general and refer to federal guidelines. The Forest Service should not identify the management of non-native species as a Forestwide goal.

Response: The terms "alien" and "non-native invasive" species are similar terms that could be used interchangeably. For the purposes of this action, the term non-native invasive species was used. Some species such as trout may not be native to the area but are desirable to anglers. Other species, such as honeybees, occur in the area, but are not native. Goal 2.4 of the Revised Forest Plan is to reduce risk from native and non-native invasive species through integrated pest management strategies. Goal 2.3 of the Revised Forest Plan is to reduce outbreak populations of invasive species or eradicate isolated infestations of invasive species and prevent their becoming established. Integrated pest management (IPM) is defined in the glossary. This general direction provides the latitude to propose strategies that can be tailored to individual situations. No single strategy would likely apply to all invasive species. Latitude is provided for resource specialists to consider and use state-of-the-art technology and strategies that can be adapted to site-specific situations.

#### **Insect and Disease Management**

#### 679. Public Concern: The Forest Service should manage insects that attack timber.

**Response**: Insect management is not an exact science. While specific treatment methods are available, their use on a large landscape scale, with few exceptions, is usually cost prohibitive. Because of the broken land ownership patterns it is difficult if not impossible to determine the cause and source (public, private, or combination of land ownership) of insect infestations. The most effective and efficient method to manage insects is through integrated pest management strategies that include manipulating vegetation condition, eradication of small populations, and combinations of control methods depending on the insect in question. The Revised Forest Plan provides for consideration of most any IPM strategy. Limitations come in the form of funding and resources to combat these insects.

#### 680. Public Concern: The Forest Service should focus on the hemlock wooly adelgid.

**Response**: Currently, there is no known method to control or suppress the hemlock wooly adelgid. It is appropriate for research needs to be identified in the Revised Forest Plan. Research of this nature is conducted by the Forest Service, but not at the local national forest level.

#### **681.** Public Concern: The Forest Service should not manage insects that attack timber.

**Response**: The Revised Forest Plan includes descriptions of desired conditions. Timber is a resource as well as a by-product of creating these desired conditions. The Revised Forest Plan provides for managing insect activity that could impact desired conditions and, in turn, impact timber quality.

#### **682.** Public Concern: The Forest Service should acknowledge that the southern pine beetle will be less of a threat in the future.

**Response**: All insect populations are cyclic. Some insect populations peak every year, while others peak every 2 to 4 years. Still others peak at longer intervals. Southern pine beetle infestations are common throughout the south on a 5 to 7 year interval. In Kentucky, southern pine beetle infestations have occurred on a much longer interval of 15 to 25 years. At a state or Forestwide scale, southern pine beetle infestations may not play a large role over the next 15 to 25 years. However, southern pine beetle are always present in the ecosystem and may become a local concern to individual stands of pine trees.

### **683.** Public Concern: The Forest Service should have entomologists or pathologists disseminate information to landowners concerning forest insect infestations.

**Response**: The State and Private Forestry branch of the Forest Service provides support services to state and private landowners. Numerous publications are available and are continually updated as new science becomes available. Additional information can be found at <a href="http://www.fs.fed.us/foresthealth/briefs/invasive\_species\_mgmt\_strategy.htm">http://www.fs.fed.us/foresthealth/briefs/invasive\_species\_mgmt\_strategy.htm</a>

## **684.** Public Concern: The Forest Service should conduct forest thinning to prevent the spread of insects and disease from the Daniel Boone National Forest to nearby private property.

**Response**: Thinning is described in the environmental impact statement as a likely action over the planning period. The amount of thinning to be done will depend on such variables as funding and other resources needed for implementation. Insects and disease are always present in the ecosystem regardless of landownership (public or private). There is no basis to assume that action or inaction on public lands would lead to devastating effects on private land. Action or inaction on private land plays a large role on the spread of insects and disease. While actions on private land cannot be accurately predicted, they are likely to be influenced by economic factors.

#### **Invasive Non-Native Species**

**685.** Public Concern: The Forest Service should control invasive and non-native species. The Forest Service should specify the prevention, control, and eradication of non-native species as an objective with standards, then develop and implement prevention strategies as recommended.

**Response**: Forestwide Goal 1 provides for maintaining a variety of life as well as the recovery of native and desirable non-native populations that are rare and declining. As defined in the glossary, an invasive species is one that can move into an area and become dominant, either numerically or in terms of cover, resource use, or other ecological impacts. Eradication of invasive species is a Forestwide goal (Goal 2.3). While the Revised Forest Plan provides general direction and limitations to project implementation, action strategies are best developed at the project level.

**686.** Public Concern: The Forest Service should inventory and monitor invasive species, analyze the effects of management activities, and analyze effects of invasive species on ecological processes.

**Response:** The Revised Forest Plan (see Chapter 5 and Appendix F) provides for monitoring as well as adjustment of management activities in the light of monitoring results. Results will be in the annual monitoring and evaluation report.

#### **687.** Public Concern: The Forest Service should eliminate the use of genetically modified organisms.

**Response**: Goal 1 of the Revised Forest Plan provides for maintaining a variety of life and the recovery of native and desirable non-native populations that are rare and declining. The Revised Forest Plan does not specifically address genetically modified organisms, either natural or human induced.

**688.** Public Concern: The Forest Service should develop standards that exclude the use of invasive species to vegetate roadsides and mineral development.

**Response**: Objective 2.3.B provides for managing isolated occurrences of invasive species to avoid outbreak conditions. Proposals to use invasive species would be inconsistent with this objective.

#### PESTICIDES, HERBICIDES, AND INSECTICIDES

**689.** Public Concern: The Forest Service should use herbicides to eradicate non-native invasive plants.

**Response**: The Revised Forest Plan provides for such activity to occur.

**690.** Public Concern: The Forest Service should acknowledge that management for butternut at the exclusion of fescue will require herbicides.

**Response**: This is a scientific fact that is more appropriately disclosed in scientific literature and evaluated at the time such action is proposed.

**691.** Public Concern: The Forest Service should provide analysis and scientific rationale supporting buffer widths for herbicide application.

**Response**: A buffer zone is provided as a margin of safety in the event of chemical drift or accidental spill during broadcast treatment. Herbicides that are commonly used for broadcast treatment are not labeled for use over standing water, but could be used much closer than the 30-foot buffer. This standard is a carry over from the 1985 Forest Plan and was not identified as an item that needed to be changed during the Analysis of the Management Situation.

**692.** Public Concern: The Forest Service should not use herbicides and pesticides. The Forest Service should find biological alternatives to using pesticides and herbicides. The Forest Service should modify vegetation standards regarding herbicides as recommended.

**Response**: Revised Forest Plan direction provides for the use of many tools to accomplish resource management objectives. Not to consider the use of herbicides would arbitrarily eliminate a tool from the resource specialist's possible management practices. Site-specific consideration is a more appropriate place to address the use of herbicides. When a project proposal includes the use of herbicides, a non-herbicide alternative is considered, thus providing a comparison of the tradeoffs of the two or more actions.

**693.** Public Concern: The Forest Service should analyze, consider, and disclose the effects of using insecticides, herbicides, and pesticides.

**Response**: This type of analysis is more appropriate at the site-specific level when herbicide use is proposed. The term "pesticides" is inclusive of insecticides and herbicides.

**694.** Public Concern: The Forest Service should require right-of-way holders to use mechanical means rather than chemicals for maintenance.

**Response**: This type of determination is more appropriate during site-specific consideration of a proposed action.

**695.** Public Concern: The Forest Service should revise and implement standards for herbicides as recommended.

**Response**: Many standards that appeared in the 1985 Forest Plan, via the 1989 VMEIS, were redundant with existing laws or Forest Service policy, which require following direction on labels. The Revised Forest Plan does not repeat direction that is already required.

#### **Fire Management**

#### **WILDLAND FIRE (GENERAL)**

**696.** Public Concern: The Forest Service should educate citizens regarding fire and provide adequate enforcement.

**Response:** This will occur as much as financing and resources permit.

**697.** Public Concern: The Forest Service should acknowledge the role of natural succession, fire, and its effects.

**Response:** Please see the Prescribed Fire section of EIS Chapter 3.

#### PRESCRIBED FIRE

698. Public Concern: The Forest Service should conduct timber harvest and use prescribed fires.

**Response:** Timber harvest and prescribed fire will be used when necessary to obtain the desired future condition of the Forest.

**699.** Public Concern: The Forest Service should reduce the use of prescribed fire. The Forest Service should use prescribed fire for the purpose of research. The Forest Service should not implement large-scale prescribed fires without conducting scientific analysis. The Forest Service should analyze and address the effects of prescribed fire on reptiles, amphibians, birds, and smoke-sensitive rare species such as the Indiana bat.

**Response:** Prescribed fire will be used when it will assist in obtaining the desired future condition of the area. Research may use these burns to improve our knowledge of their effects. Prescribed burning, like all projects on the Daniel Boone National Forest, must undergo second-level, site-specific analysis for effects to proposed, endangered, threatened, and sensitive species and other resources. Many plant and wildlife species on the Forest can benefit from the appropriate application of prescribed fire. The viability of plants and animals will be considered in the decision to burn. Effects of actions involving federally listed species are reviewed by the USFWS as required by the Endangered Species Act.

### **700.** Public Concern: The Forest Service should prohibit the ignition of prescribed fires with chemical agents in rare communities.

**Response:** Site-specific analysis will determine what the appropriate ignition method is for a given location.

#### **701.** Public Concern: The Forest Service should educate the public on the use of fire as a management tool.

**Response:** This will be done as financing and resources permit.

#### **702.** Public Concern: The Forest Service should modify 1.G-FIRE-WET-1.

**Response:** We believe the standard is appropriate as stated.

# **703.** Public Concern: The Forest Service should allow fires to move into glades from other areas instead of igniting fires within glades.

**Response:** Management actions including the use of prescribed fire for areas adjacent to rare communities will be determined by site-specific analysis.

### **704.** Public Concern: The Forest Service should restrict the use of fire to single tree or small group selection in scattered spots of pine stands. Such fires should be confined by ground crews.

**Response:** We respectfully disagree. Recent studies no longer support this previous view.

#### **705.** Public Concern: The Forest Service should not use helicopters for igniting prescribed fires.

**Response:** Helicopter ignition with the use of plastic sphere dispensers has proven to be safe, cost efficient, and effective.

### **706.** Public Concern: The Forest Service should not use prescribed fires where private land or homes might be affected.

**Response:** Proximity to private land and homes is taken into consideration and planned for in any site-specific burn plan.

# **707.** Public Concern: The Forest Service should not conduct prescribed fires because of air pollution.

**Response:** The Plan addresses these concerns in Goal 4.2, Objective 4.2a, b, and c; and in Forestwide Standard DB-FIRE 3. The EIS has been edited to emphasize that the air quality analysis for the prescribed fire program is a regional analysis and does not represent actual emission increases in any one locality (see Air Quality, Environmental Effects of Prescribed Fire).

### **708.** Public Concern: The prescribed fire standard DB-FIRE-8 should apply only to *known* Indiana bat roosting areas.

Response: The word "known" has been added, as suggested.

#### **709.** Public Concern: The Forest Service should not use prescribed fire on slopes.

**Response:** The potential for soil movement off site is considered before deciding whether to burn an area.

710. Public Concern: The Forest Service should re-examine whether all chemical, fire, manual, and mechanical methods are realistically available for use in the forest. The Forest Service should not use prescribed fire, but instead, use chemical treatments to suppress competition in understories. The Forest Service should specify to what degree fire would be used to generate oak and the effects of fire on biodiversity. The Forest Service should not use heavy equipment to construct fire-containment rings, nor fire and insecticides.

**Response:** Appropriate site preparation and restoration methods will be evaluated based upon the intended results and the site on which the action will occur. The specific characteristics of the site will determine what equipment and techniques will be used to achieve the appropriate results.

711. Public Concern: The Forest Service should not apply Western fire policies to Eastern forests.

**Response:** Fire played an important role in shaping the species-rich landscape of the southeastern U.S. Fires of both natural and cultural origin were common on the landscape when the present arborescent flora migrated into the region after the last ice age, 8,000 to 10,000 years ago. The LMP provides direction for the desired future condition of ecosystems. In many cases, fire is necessary to meet those objectives.

**712.** Public Concern: The Forest Service should expend funds for controlled burns in the West where it is needed, not in the East.

**Response:** Currently, only about 12 percent on the national fuel reduction dollars are allocated to the Southeast Region of the Forest Service.

**713.** Public Concern: The Forest Service should use native or non-invasive species to stabilize fire control lines.

**Response:** Forest Service, Region 8, policy does not allow the use of species that have been determined to be invasive within the Region.

**714.** Public Concern: The Forest Service should modify fire management standards, as recommended.

**Response:** Changes were considered and made where appropriate.

#### **Mineral Resources**

#### FEDERAL AND PRIVATE MINERAL RIGHTS

**715.** Public Concern: The Forest Service should not allow the development of mineral (coal, etc.) resources. The Forest Service should not issue or renew any mineral leases.

**Response:** Through the passage of the 1920 Mineral Leasing Act, Congress established a program to provide for oil, gas, and coal development on federal lands, including those national forests reserved from the public domain. The Mineral Leasing Act for Acquired Lands of 1947 extends the provisions of the mineral leasing laws to acquired National Forest System lands and requires the consent of the Secretary of Agriculture prior to leasing. The purpose of this Act is "to promote the mining of coal, phosphate, sodium, potassium, oil, oil shale, gas, and sulphur on lands acquired by the United States." The Daniel Boone National Forest strives to achieve the goals outlined in these laws, while practicing sound environmental reviews to protect the environment.

716. Public Concern: The Forest Service should specify that land subject to mineral and energy activities will be returned to "its pre-disturbance land use." The Forest Service should clearly specify that it will have input and direct control over how owners of private mineral rights are allowed to reclaim disturbed federal lands.

**Response:** Our relationship with private mineral operators is based on state laws. For reserved rights there are the USDA Secretary's Rules and Regulations that were made a part of the deed when the property was acquired. Outstanding mineral rights are also based on the deed of severance that separated the mineral estate from the surface estate. Ownership of private minerals is a right and not a privilege. Owners of private minerals have the right of access to those minerals. The Daniel Boone National Forest works with the mineral holder to create a Plan of Operations that strives to meet the objectives of both parties.

**717.** Public Concern: The Forest Service should specify mineral development standards that protect ecosystems.

**Response:** Each prescription area has a standard for mineral extraction, which offers protection for the environment while allowing appropriate opportunities for mineral development. Compared to the 1985 Forest Plan, standards in the Revised Forest Plan include more provisions that take into account the various surface resources, including ecosystems, on the National Forest.

718. Public Concern: The Forest Service should not locate mineral development activities where they will negatively impact geologic resources with identified values. The Forest Service should prohibit mining near rare communities.

**Response:** Management guidance in this area is clear under Forestwide Standards DB-MIN-2 and DB-MIN-3 and Rare Community prescription area Standards 1.G-MIN-1 and 1.G-MIN-2.

719. Public Concern: The Forest Service should specify standards for mineral development that protects riparian areas, clifflines, rare communities, and old-growth, and make the areas administratively unavailable or specify no-surface occupancy. The Forest Service should prohibit mineral activities within wild and scenic rivers, the Red River Gorge, and the Natural Arch Scenic Area by classifying them as Not Administratively Available. The Forest Service should modify 1.C-MIN-1 to prohibit mining within cliffline communities. The Forest Service should prohibit mining near rare communities.

**Response:** The Wild corridors of the Wild and Scenic Rivers, and the two Wildernesses are withdrawn from federal mineral entry by law. The other areas mentioned have standards that adequately protect surface resources, while allowing mineral development. The Minerals section in Chapter 3 of the FEIS identifies federal mineral availability and associated stipulations.

**720.** Public Concern: The Forest Service should analyze an alternative that limits the negative effects of mineral development.

**Response:** Alternative B-1 includes the most limited opportunities for minerals development. See Chapter 2 of the FEIS.

### **721.** Public Concern: The Forest Service should analyze, consider, and disclose the full details and effects associated with mineral development.

**Response:** The Reasonably Foreseeable Development (RFD) in the FEIS discloses the most likely activity during the planning period. These figures are used in other areas of the FEIS, such as the soil and water, air resources, etc., to determine the effects of this projected activity. The Surface Mining Control and Reclamation Act of 1977 does not authorize surface mining of national forest lands east of the 100<sup>th</sup> meridian. Therefore, coal-mining effects will be limited to the effects of underground mining. The coal mining potential for the area has been documented in the FEIS.

### **722.** Public Concern: The Forest Service should ensure that no toxic chemicals affect the surface or contaminate bodies of water during mineral development activities.

**Response:** Activities related to oil and gas drilling are conducted within the parameters of a State permit. In developing an Operations Plan for oil and gas development, the project level is where adjustments are made to protect water resources from impacts such as sedimentation and contamination. Earthen pits are accepted by the State of Kentucky for natural gas productions, while tanks are used in the development of oil resources.

## **723.** Public Concern: The Forest Service should specify that all lands will be restored to a natural state once the mineral activity is completed, and disclose analysis of restoration methods.

**Response:** Reclamation plans are required for oil and gas operations on the Daniel Boone National Forest. The reclamation will include seeding of the disturbed area with native and non-invasive plant species.

### **724.** Public Concern: The Forest Service should document each permittee's past reclamation performance.

**Response:** Permittees on minerals projects work with a designated Forest Service representative that oversees the project from the beginning of implementation through to reclamation. Should a problem arise, it is documented and addressed.

#### 725. Public Concern: The Forest Service should require proof of bonding for reclamation.

**Response:** All permittees under the state permitting process have a blanket bond for their operations within Kentucky, and an individual bond for wells. These are to insure proper plugging and abandonment of wells. The individual well bonds are to accompany the well permit when it is submitted.

#### **726.** Public Concern: The Forest Service should restore private inholdings and areas adjacent to the forest that affect resources on the forest.

**Response:** The Daniel Boone National Forest is not authorized to use allocated funds directly on private lands. Partnerships with other interested parties may be a useful tool in pooling resources to remedy environmental problems that occur on national forest land and private land.

#### **727.** Public Concern: The Forest Service should specify in DB-MIN-1 that all appropriate state and Federal permits are required prior to conducting surface-disturbing activities.

**Response:** A change has been made to DB-MIN-1, as suggested.

### **728.** Public Concern: The Forest Service should develop an alternative that does not include the leasing of Federal mineral rights.

**Response:** Alternative B-1 has very minimal opportunities for Federal mineral development. The existing laws that govern leasing of federal minerals make it clear that we are to include minerals activities within the management of the national forest lands where it is possible to integrate them into forest management.

#### **729.** Public Concern: The Forest Service should prohibit mining where mineral rights are publicly held because of economic and environmental issues.

**Response:** The existing laws that govern leasing of federal minerals make it clear that we are to include minerals activities within the management of the national forest lands where it is possible to integrate them into forest management.

#### **730.** Public Concern: The Forest Service should purchase private mineral rights under publicly owned forest land.

**Response:** Consolidation of the surface and subsurface estate on National Forest System lands is addressed under Goal 13. In addition, Objective 13.2.B identifies those prescription areas where the mineral estate is one of the priority areas to be acquired. Areas not listed in this objective do have standards and stipulations that provide some conditions for the development of minerals.

### **731.** Public Concern: The Forest Service should acknowledge that the Tennessee Valley Authority (TVA) no longer owns coal underlying the Redbird Ranger District.

**Response:** The respective table has been edited for clarification.

#### **732.** Public Concern: The Forest Service should implement restrictions on private mineral right holders.

**Response:** In the administration of private mineral rights, the exercise of those rights is not a privilege but a right owned by a private party. As such, the Forest Service has no role in leasing, and the BLM is not involved in approval of an Application for Permit to Drill (APD) or a Lease by Application (LBA) for coal. Since there is no lease or permit, there is no contractual agreement to be met. The Daniel Boone National Forest negotiates with the owner or operator of the private mineral rights to address environmental concerns at the project level.

#### **733.** Public Concern: The Forest Service should modify Table 3-16 to depict lands currently under lease.

**Response:** This information has been added to the Minerals section in Chapter 3 of the FEIS.

#### SURFACE OCCUPANCY

#### **734.** Public Concern: The Forest Service should specify a no-surface occupancy stipulation for rare communities.

**Response:** The Rare Community prescription area encompasses many types of features that are on the National Forest. The controlled surface use stipulation highlights the area(s) of concern (depending on the type of rare community identified, when leasing occurs, and the project level analysis will be used to determine the potential for undesirable effects to any rare communities in the project area. The analysis will also be used to determine if standards in the Revised Forest Plan are sufficient or whether additional mitigation measures are called for.

### **735.** Public Concern: The Forest Service should specify a No Surface Occupancy stipulation and not include the Controlled Surface Use stipulation for riparian corridors.

**Response:** Standard 1E-MIN-1 has been edited for clarification. Federal oil and gas leases will contain either a No Surface Occupancy or Controlled Surface Use stipulation, depending on site-specific analysis. The site-specific analysis will determine if the conditions at the site will allow for limited surface occupancy in the riparian corridor. This arrangement will allow leasing of oil and gas only when it can be done in a way that is consistent with the desired future condition of the Riparian Corridor prescription area.

#### **736.** Public Concern: The Forest Service should specify a no-surface occupancy stipulation for Zone 2 in 5C-MIN-1.

**Response:** The Source Water Protection prescription area is entirely based on Kentucky Division of Water (DOW) Source Water Areas and the standards were developed with their input. This standard was written in an effort to be consistent with State DOW direction. This can be modified during future site-specific analysis.

# **737.** Public Concern: The Forest Service should modify DB-MIN-3 to specify no surface occupancy within drainage areas associated with karst systems, as recommended.

**Response:** This standard was designed to provide adequate protection of these features in most cases. Further protection may occur as a result of site-specific analysis. Additional direction for karst mapping and management is given in Objective 3.0.B, and the objectives under Goal 6, one of which is to develop additional specific management plans for each significant cave.

### **738.** Public Concern: The Forest Service should disclose what it can do to restrict activities under existing and future leases, and conditions.

**Response:** The Revised Plan addresses new concerns about forest resources and provides protection for those resources. The stipulations and the standards applied in the Revised Forest Plan place more restrictions on the leasing of federal minerals than the 1985 Forest Plan. The Minerals section in Chapter 3 of the FEIS has been rewritten to better explain these stipulations.

## **739.** Public Concern: The Forest Service should clarify controlled-surface use language to specify that facilities will be limited to one percent of an old-growth stand in 1.I-MIN-1.

**Response:** The intent of this old-growth stipulation is that manipulation of the surface in old-growth areas be limited to 1 percent of each individual old-growth area to be affected, not 1 percent of the entire prescription area. This includes nine discrete areas averaging approximately 1,700 acres each. The words "each individual" have been added to the standard.

#### 740. Public Concern: The Forest Service should prohibit mining under old-growth.

**Response:** Consolidation of the surface and subsurface estate on National Forest System lands is addressed in the Revised Forest Plan under Goal 13. In addition, Objective 13.2.B identifies those prescription areas where the mineral estate is one of the priority areas to be acquired. A decision on prohibiting mining in these areas will be addressed in project level analysis.

### 741. Public Concern: The Forest Service should not allow surface occupancy for minerals in the Clifty Wilderness Area and Beaver Creek Wilderness Area.

**Response:** These areas are statutorily withdrawn for mineral entry by law.

#### **MINES**

#### 742. Public Concern: The Forest Service should develop a standard that addresses subsidence.

**Response:** The Daniel Boone National Forest requires that all proposals adhere to State standards and requirements for all minerals projects. The Forest Service then adds additional mitigations to address our concerns, including subsidence concerns. The Daniel Boone National Forest works within the site-specific analysis along with the state permitting process to identify concerns such as surface subsidence.

### **743.** Public Concern: The Forest Service should require a vertical buffer zone of at least 200 feet for mining and require that 50 percent of the coal seam remain in place.

**Response:** What the commenter suggests is one of several possible site-specific mitigation measures that may be required. The mining methods, geology of the area, percent of coal removed and other factors affect the potential for subsidence, which we will continue to review during the project-level analysis conducted for each proposal.

# **744.** Public Concern: The Forest Service should analyze and address the cumulative underground hydrological effects of mining.

**Response:** Broad, programmatic-level cumulative effects are discussed in the Minerals section in Chapter 3 of the FEIS. However, the mining methods, geology of the area, percent of coal removed, and other factors determine the specific effects of each project. Specific cumulative effects will be determined and disclosed in each project's environmental documentation.

#### 745. Public Concern: The Forest Service should not allow mountaintop removal.

**Response:** The Surface Mining Control and Reclamation Act of 1977 states that surface mining is permitted in National Forest areas west of the 100<sup>th</sup> meridian. Therefore, the Daniel Boone National Forest is not threatened by surface mining impacts from new development.

# **746.** Public Concern: The Forest Service should correct plan inconsistencies regarding coal production and leasing, and cite consultation with the Bureau of Land Management (BLM).

**Response:** The "Coal Production/Consumption in Kentucky" graph has been corrected (FEIS, Chapter 3, Minerals). The BLM is now listed under "Other Agency Consultants" (FEIS, Chapter 5).

#### 747. Public Concern: The Forest Service should not allow mining in special areas.

**Response:** Through the passage of the 1920 Mineral Leasing Act, Congress established a program to provide for oil, gas, and coal development on federal lands, including the national forests reserved from the public domain. The Mineral Leasing Act for Acquired Lands of 1947 extends the provisions of the mineral leasing laws to acquired National Forest System lands and requires the consent of the Secretary of Agriculture prior to leasing. The purpose of this Act is "to promote the mining of coal, phosphate, sodium, potassium, oil, oil shale, gas, and sulphur on lands acquired by the United States." The Daniel Boone National Forest strives to achieve the goals outlined in these laws, while practicing sound environmental reviews to protect the environment.

#### **748.** Public Concern: The Forest Service should require an EIS for Leslie Resources, Inc. to analyze the effects for both Tract 107Ab and Tract 745.

**Response:** This site-specific concern is outside of the scope of this Revised Forest Plan and EIS. The purpose of this EIS is to analyze the potential effect of the programmatic goals, objectives, and standards for the Daniel Boone National Forest.

# MINE RUNOFF, LEACHATE, AND TAILINGS AND MINE RECLAMATION AND RESTORATION

# **749.** Public Concern: The Forest Service should specify plans to reclaim and remediate mineral development sites.

**Response:** Goals 9 and 10 of the Revised Forest Plan address this concern. The Daniel Boone National Forest is currently completing an inventory of abandoned mine sites in order to prioritize the impacts to the environment and prepare to take appropriate actions to acquire funding for remediation projects.

**750.** Public Concern: The Forest Service should inventory old leaching mine sites, specify the number and location of such sites, and conduct site clean-up and restoration. The Forest Service should establish the reclamation of old mines and leach and glob piles as a high priority. The Forest Service should inventory abandoned and inactive mines and conduct enforcement to effect remedial investigation and corrective action.

**Response:** The Daniel Boone National Forest is currently completing an inventory abandoned mine sites in order to prioritize the impacts to the environment and prepare to take appropriate actions for remediation of the sites.

**751.** Public Concern: The Forest Service should only permit surface-disturbing activities that will be reclaimed to forest and fish and wildlife habitat.

**Response:** In most cases we recommend that forest is the selected option for a post mining land use for activities that are within or in close proximity to the National Forest.

#### LEASABLE (OIL, GAS, COAL, PIPELINES)

#### **752.** Public Concern: The Forest Service should not allow the withdrawal of gas or oil from forest land.

**Response:** Through the passage of the 1920 Mineral Leasing Act, Congress established a program to provide for oil, gas, and coal development on federal lands, including those national forests reserved from the public domain. The Mineral Leasing Act for Acquired Lands of 1947 extends the provisions of the mineral leasing laws to acquired National Forest System lands and requires the consent of the Secretary of Agriculture prior to leasing. The purpose of this Act is "to promote the mining of coal, phosphate, sodium, potassium, oil, oil shale, gas, and sulphur on lands acquired by the United States." The Daniel Boone National Forest strives to achieve the goals outlined in these laws, while practicing sound environmental reviews to protect the environment.

**753.** Public Concern: The Forest Service should update standards, prescriptions, and conditions for oil and gas special use permits and authorizations, as recommended.

**Response:** The Daniel Boone National Forest follows guidelines that have some new conditions for oil and gas operations. These guidelines were developed from experience in working with these projects and input from Forest Service regional specialists.

**754.** Public Concern: The Forest Service should analyze and disclose the effects of hazardous material spills, and develop contingency plans. The Forest Service should analyze, consider, and disclose full details and effects associated with oil and gas development.

**Response:** The FEIS provides information on significant effects of oil and gas development at the programmatic scale. Additional information has been added in Chapter 3 of the FEIS. More detailed effects are disclosed at the site-specific level based upon the specific activity and characteristics of the site.

#### **Alternative Energy Products**

**755.** Public Concern: The Forest Service should invest money in renewable energy instead of building roads for timber harvest.

**Response:** Wood and other types of biomass can be used as renewable energy. Therefore, in a sense, when a road is necessary for forest management, we are investing in renewable energy. However, since there is currently limited demand in the region for fuelwood, very little of the timber harvested from the Daniel Boone National Forest is used for fuelwood. Investment in other types of renewable energy is beyond the scope of the Revised Forest Plan.

#### Social and Economic Values

**756.** Public Concern: The Forest Service should develop a forest plan that benefits the American public.

**Response:** That is the intent of the Revised Forest Plan. The Record of Decision includes the rationale for the Regional Forester's decision and why he believes his decision is in the public interest.

**757.** Public Concern: The Forest Service should use reliable data and all available information and conduct valid economic analysis using valid methods, and disclose all information.

**Response:** Additional information has been added to the socioeconomic section in Chapter 3 of the FEIS and the socioeconomic section of Appendix B of the FEIS. Appendix B gives a general overview of how the economic impacts were modeled. More detailed information on the modeling is in the process records. The Forest Service has chosen not to use values based on questionable and controversial methodologies and values not specifically required by Forest Service directives.

**758.** Public Concern: The Forest Service should eliminate Goal 8.1, "Emphasize utilization based on market conditions."

**Response:** Although not always possible, there are times when it is feasible to respond to market conditions and every effort should be made to take advantage of the opportunity so that revenues can be maximized.

759. Public Concern: The Forest Service should clarify the "substitution effect," "associated jobs," and "induced jobs" used in the IMPLAN model. The Forest Service should disclose details of input-output analysis, and how income and employment multipliers were determined. The Forest Service should acknowledge the limitations of the IMPLAN model. The Forest Service should analyze how the local economy can supply the timber that the forest now provides. The Forest Service should analyze the economic benefits of the ecosystem benefits provided by intact forests.

**Response:** Additional information has been added to the socioeconomic section in Chapter 3 of the FEIS and the socioeconomic section of Appendix B of the FEIS. Appendix B gives a general overview of how the economic impacts were modeled. More detailed information on the modeling is in the process records. All models at this level of analysis are used to compare the relative differences in alternatives.

**760.** Public Concern: The Forest Service should analyze and disclose how much money is generated by each recreation activity and all other forest activities, across alternatives and in aggregate.

**Response:** Additional information has been added to the socioeconomic section in Chapter 3 of the FEIS and the socioeconomic section of Appendix B of the FEIS. Appendix B gives a general overview of how the economic impacts were modeled. More detailed information on the modeling is in the process records, which are available for inspection upon request. You will find in the process records that recreation activities were considered separately and then aggregated to develop a programmatic analysis.

**761.** Public Concern: The Forest Service should increase the payment in lieu of taxes that Kentucky counties receive.

**Response:** This is outside of the scope of the Revised Forest Plan. Congress determines such payments.

**762.** Public Concern: The Forest Service should manage forest resources in a manner that generates the most employment and profit.

**Response:** The rationale for the Selected Alternative is documented in the Record of Decision. This rationale explains how the selected alternative maximizes "net public benefits," which is not to be confused with "present net value." "Net public benefits" includes considering those benefits and costs that cannot be quantified.

**763.** Public Concern: The Forest Service should educate the public on the financial losses incurred by timber sales, and the fact that most forest jobs are in the recreation field. The Forest Service should demonstrate that timbers sales are not below-cost activities, rather, the revenue is used to finance unfunded land ownership costs and provides other benefits.

**Response:** The Revised Forest Plan provides for the use of commercial timber sales as a tool to achieve and maintain desired future conditions for forest vegetation. Consequently, the purpose and need for timber sale projects will reflect a net benefit to the public and ecosystems.

**764.** Public Concern: The Forest Service should demonstrate that the public is better off economically with timber harvest than without, and compare the value of Forest land as timber to the value of intact ecosystems.

**Response:** Alternatives C and C-1 (the preferred alternative) emphasize providing for the sustainability of forest ecosystems. The intent is to maintain a variety of habitat components making up functioning ecosystems. Doing so can require vegetation management activities, including timber harvest. Timber harvesting will be used when it is determined to be the most effective and the most cost efficient method to achieve the desired results. We believe that functioning ecosystems are socially and economically valuable, and worth the vegetation management costs.

#### **765.** Public Concern: The Forest Service should conduct an economic efficiency analysis rather than a cost effectiveness analysis.

**Response:** Additional information has been added to the socioeconomic section in Chapter 3 of the FEIS and the socioeconomic section of Appendix B of the FEIS. Appendix B gives a general overview of how the economic impacts were modeled. More detailed information on the modeling is in the process records. The rationale for the selected alternative is documented in the Record of Decision. This rationale explains how the selected alternative maximizes "net public benefits" which is not to be confused with "present net value." "Net public benefits" includes considering those benefits and costs that cannot be quantified.

### **766.** Public Concern: The Forest Service should conduct a benefit/cost analysis of ending timber harvest on Forest land and account for real prices, costs, and non-consumptive values.

**Response:** Additional information has been added to the socioeconomic section in Chapter 3 of the FEIS and the socioeconomic section of Appendix B of the FEIS. Appendix B gives a general overview of how the economic impacts were modeled. More detailed information on the modeling is in the process records. Timber sales, when needed, provide a net benefit to the public and ecosystems. Because it is a tool used to attain the desired future condition, the economics and results are described as part of a project analysis.

#### 767. Public Concern: The Forest Service should not subsidize industry activities on Forest land.

**Response:** This concern is outside the scope of the Revised Forest Plan. Commercial activities conducted on the national forests by industries or other private enterprises are conducted under stringent contractual controls established by the agency.